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ProArtisan 2

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PRO Artisan 2

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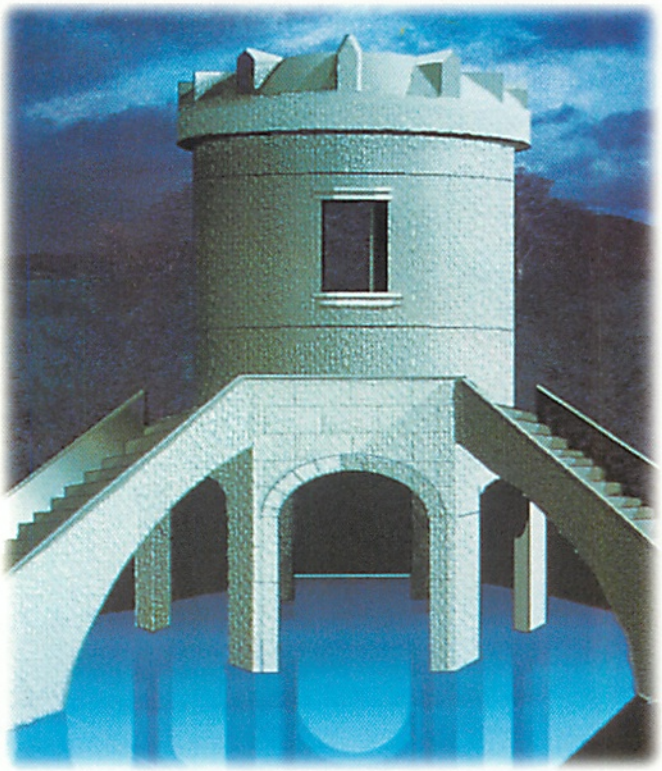

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cover FEATURE

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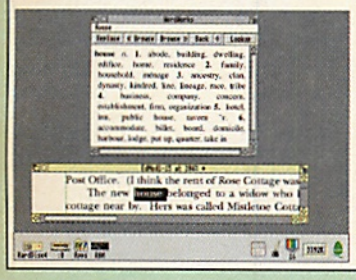

## COVER DISK

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Brick bustin' fun

**Enigma**
Tease the old grey matter

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**TextCheck**
Give your documents style

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# ICS

## 051-625 1006

## SOFTWARE

OCTOBER 1993

| | | |
|---|---|---|
| **1** | | |
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ACORN WORLD

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| Phonic Games | Fisher-Marriott | £28 |
| Photopia | CIS | £POA |
| Picture Book | Triple R | £15 |
| Picture It! | Appian | £29 |
| – Topic discs | each | £9 |
| PinPoint | Longman | £65 |
| – site licence | | £386 |
| PipeDream 3 | Colton | £72 |
| PipeDream 4 | Colton | £119 |
| PipeDriver Dot 1 | ICS | £10 |
| Pipe Mania | Empire | £18 |
| Pirate, age 8-14 | Chalksoft | £19 |
| Placard | ICS | £10 |
| – site licence | | £30 |
| Plague Planet | Alpine | £13 |
| PlayBack | RISC | £18 |
| Play It Again Sam 1 | Superior | £20 |
| Plot | Clares | £POA |
| Podd, KS1,2 | ESM | £25 |
| Podd – Welsh, KS1,2 | ESM | £38 |
| Polyominoes | Topologika | £26 |
| Populous | Krisalis | £22 |
| Poster | 4mation | £75 |
| PowerROUTER | Silicon | £159 |
| Prehistoric Animals, sprites | Micro Studio | £16 |
| Premier | Circle | £71 |
| – DataBase | Circle | £25 |
| – WordProc | Circle | £25 |
| Presenter GTi | Lingenuity | £66 |
| PrimeArt, KS1-4 | Minerva | £68 |
| PrimeMover, KS2-4 | Minerva | £75 |
| PrimeSolver, KS1-4 | Minerva | £POA |
| PrimeWord, KS2-4 | Minerva | £51 |
| Printer Drivers, RISC OS: | | |
| Canon BubbleJet, Canon LBP, Canon PJ1080, ColourCel, Epson JX, Epson ESC-P2, HP, Integrex 132 – each | Ace | £19 |
| Deskjet 500C, Epson / Star colour - each | RISC | £15 |
| ProDrivers: Canon LBP8, Epson ESC-P2, HP Colourjet – each | Ace | £37 |
| TurboDrivers: Canon, Epson Stylus 800, HP – each | CC | £42 |
| ProArtisan 2 | Clares | £109 |
| ProCAD, KS4 | Minerva | £394 |
| Programming in ANSI Standard C on the Archimedes | Sigma | vo £15 |
| Prophet (requires 2 Mb) | Apricote | £145 |
| Prophet Entry Level | Apricote | £10 |
| ProSHEET | Silicon | £36 |
| Protext | Arnor | £117 |
| Provocator | Computer Tutorial | £15 |
| Puncman 1 and 2 | Chalksoft | £16 |
| Puncman 3 and 4 | Chalksoft | £16 |
| Puncman 5 to 7 | Chalksoft | £18 |
| Punctuate | Xavier | £31 |
| Punctuate! | Topologika | £25 |
| **Q**DBug | Leading Edge | £58 |
| Quest for Gold | Krisalis | £19 |
| QuicKey | ICS | £10 |
| – site licence | | £30 |
| **R**eal McCoy 2 | Fourth Dim | £23 |
| Real McCoy 3 | Fourth Dim | £23 |
| Real McCoy 4 | Fourth Dim | £27 |
| Recall, age 8-13 | Sherston | £37 |
| Redshift | Minerva | £10 |
| RemoteFS | Atomwide | £45 |
| Render Bender 2 | Clares | £77 |
| Repton 3 | Superior | £19 |
| Resultz | Colton | £109 |
| Revelation 1 | Longman | £39 |
| Revelation 2 | Longman | £75 |
| Revelation 2 CD Rom | Longman | £98 |
| Revelation ImagePro | Longman | £127 |
| Reversals | Chalksoft | £17 |
| Rhapsody 2 | Clares | £44 |
| Rhapsody 3 | Clares | £79 |
| Rhythm-Bed | Clares | £38 |
| RhythmBox II, age 8+ | EMR | £34 |
| RiscBASIC Compiler | Silicon | £77 |
| RiscForth Compiler | Silicon | £72 |
| RISC OS 3 First Steps | Dabs | vo £POA |
| RISC OS 3 Programmer's Reference Manual | Acorn | vo £99 |
| RISC OS Companion Vol 1 | Oak | vo £49 |
| RISC OS Style Guide | Acorn | vo £13 |
| RoboLogo | Silicon | £38 |
| Round the World Yacht Race, age 9+ | Storm | £25 |
| **S**aloon Cars Deluxe | Fourth Dim | £25 |
| – **Deluxe Extra Courses** | Fourth Dim | **£14** |
| **S-Base Developer** | Longman | **£140** |
| S-Base Developer Plus | Longman | £255 |
| S-Base Network | Longman | £275 |
| **S-Base Personal** | Longman | **£70** |
| Schema | Clares | £95 |
| Schema 2 | Clares | £POA |
| Science, drawfiles | Micro Studio | £25 |
| Score Draw | Clares | £44 |
| Scorewriter PMS Desktop, age 12+ | EMR | £147 |
| ScreenPlay | Widgit | £35 |
| ScreenTurtle version 2 | Topologika | £45 |
| Search and Rescue, age 9+ | Storm | £27 |
| Seashore Guide, drawfiles | Micro Studio | £16 |
| Seelinks – Ourselves, KS1,2 | ESM | £27 |
| Seelinks – Pond Watch, KS2 | ESM | £35 |
| Seelinks – Tourism, KS3 | ESM | £55 |
| Seelinks – Transport, KS2 | ESM | £35 |
| Serenade | Clares | £106 |
| Serpents | CIS | £POA |
| Settlement, KS3 | ESM | £31 |
| ShapeFX | Data Store | £10 |
| ShareHolder | Silicon | £96 |
| ShareHolder Professional | Silicon | £164 |
| ShowPage | CC | £143 |
| Shylock Gnomes, age 10-15 | Selective | £16 |
| Sim City | Krisalis | £22 |
| SkyHunter | Longman | £22 |
| Sleuth | RISC | £42 |
| smArt | 4mation | £50 |
| smArt Aliens, Animals, Dinosaurs, Egypt, Europe*, Faces*, Fantasy, Fashion, Fiddles & Drums, Heraldry, Homes*, Leisure*, Look Smart, Smartoons, Trees and Gardens *Please specify English, French, German, Spanish or Welsh – each | 4mation | £15 |
| smArtFiler | 4mation | £32 |
| smArt Modern Languages | 4mation | £19 |
| Smudge the Spaniel, age 4-8 | Storm | £20 |
| Snippet (new version) | 4mation | £32 |
| Soapbox | Xavier | £34 |
| SolidCAD | Silicon | £77 |
| SolidsRender | Silicon | £77 |
| SolidTools | Silicon | £204 |
| – education price | | £194 |
| SongBook, age 3-10 | EMR | £24 |
| Sound Engineer, age 12+ | EMR | £59 |
| Sound-FX Maker | CIS | £POA |
| Sound-FX Maker & Photopia | CIS | £POA |
| Sounds & Rhymes | Xavier | £29 |
| Spark | David Pilling | £5 |
| SparkFS | David Pilling | £20 |
| Sparkle | Morley | £59 |
| Special | ICS | £10 |
| – site licence | | £30 |
| Speech! | Superior | £18 |
| Spelling week-by-week | Chalksoft | £20 |
| Spex | ExpLAN | £98 |
| Spheres of Chaos | Matt Black | £19 |
| Splash, age 7-11 | Sherston | £19 |
| Splice | Ace | £34 |
| Split an Image, age 7-16 | Sherston | £16 |
| Spoken Word | Wyddfa | £16 |
| Spooler | Computer Tutorial | £9 |
| Sporting Triangles | CDS | £19 |
| SportsDay | Selective | £20 |
| SportsPeople | Selective | £20 |
| SpriteEd | Computer Tutorial | £17 |
| SpySnatcher | Topologika | £12 |
| Square Route | Computer Eyes | £16 |
| Squirrel | Digital Services | £120 |
| Starspell Plus | Fisher-Marriott | £19 |
| StartWrite | Icon | £55 |
| StockPack | Topologika | £37 |
| StoryBook, age 3-10 | EMR | £59 |
| StrongED | Stallion | £22 |
| Studio24Plus Version 2, age 11+ | EMR | £149 |
| Studio24Plus Version 3, age 12+ | EMR | £210 |
| Stunt Racer | Fourth | £25 |
| SUMthing | Resource | £19 |
| SuperDump | Silicon | £20 |
| Superior Golf | Superior | £14 |
| SuperPlot | Silicon | £20 |
| Swiv | Krisalis | £19 |
| **T**ABS | ExpLAN | £95 |
| Talisman | Minerva | £8 |
| Talking Pendown | Longman | £54 |
| Talking Pictures | Wyddfa | £16 |
| Target Maths | Triple R | £15 |
| Technodream (Nevryon 2) | Superior | £19 |
| TechWriter | Icon | £159 |
| Thinklink | Xavier | £29 |
| ThinkSheet | Fisher-Marriott | £38 |
| Thundermonk | Minerva | £11 |
| Tiles | Brain Games | £16 |
| Timeshare | Fisher-Marriott | £19 |
| Timetabler | Minerva | £549 |
| Time Traveller, KS2 | ESM | £37 |
| – Britain Since the 1930s, KS2 | | £30 |
| – Expansion, Trade and Industry, KS3 | | £36 |
| – Making of the United Kingdom, KS3 | | £36 |
| – Medieval Realms, KS3 | | £36 |
| – The Victorians, KS2 | | £30 |
| TinyDraw/TinyPuzzle | Topologika | £34 |
| TinyPuzzle | Topologika | £24 |
| Titler | Clares | £115 |
| Toolkit Plus | Clares | £36 |
| Tools Graphics, drawfiles | Micro Studio | £23 |
| Topographer | Clares | £61 |
| Touch Type | Iota | £38 |
| Tower of Babel | Cygnus | £17 |
| Trace | David Pilling | £5 |
| Tracer | Midnight | £46 |
| Tracker | Leading Edge | £37 |
| Transport, drawfiles | Micro Studio | £25 |
| Turbo Type | CIS | £POA |
| Turbo Type, Sound-FX Maker, E-Numix | CIS | £POA |
| Tween | Ace | £35 |
| Twin World | UBI Soft | £14 |
| TWO (Task and Window Organiser) | ICS | £10 |
| – site licence | | £30 |
| TypeStudio | RISC | £38 |
| **U**tility Disc 1 | Data Store | £8 |
| Utility Disc 2 | Data Store | £13 |
| Utility Disc 3 | Data Store | £7 |
| Utility Collection | Data Store | £21 |
| **V**ector | 4mation | £75 |
| View»Mac 3 | Human | £65 |
| – Arc/Mac Cable | Human | £24 |
| Viewpoints, age 7-11 | Sherston | £37 |
| Virtual Golf | Fourth Dim | £25 |
| Visual Backup | Dabhand | £39 |
| Vox Box | Clares | £44 |
| **W**aiter | Digital Services | £35 |
| Waterloo (not OS 3.1) | Turcan | £19 |
| Whale Facts | Topologika | £31 |
| Wordbank | Topologika | £25 |
| Words and Pictures | Chalksoft | £18 |
| WordWorks | CC | £38 |
| Wordz | Colton | £85 |
| World Geography Maps, draw | Micro Studio | £23 |
| WorldMaker, KS3,4 | ESM | £51 |
| World Map Study, KS3,4 | ESM | £61 |
| Worldscape | Leading Edge | £17 |
| World Wildlife, sprites | Micro Studio | £16 |
| Worra Battle | Oak | £15 |
| WorraCAD | Oak | £79 |
| **Y**acht 2 | Computer Tutorial | £49 |
| Yacht 7 | Computer Tutorial | £94 |
| **Z**arch | Superior | £14 |
| Zelanites (not OS 3) | Micro Power | £15 |
| Zool | Gremlin | £19 |

# ICS

**051-625 1006**

## HARDWARE

### I²C PRODUCTS . . .

| | | |
|---|---|---|
| AnDi Oddule | Baildon | £39 |
| I²C Adaptor (needed unless you already have an I²C socket) | Baildon | £10 |
| I²C SWI (enhanced IIC_Control) | Baildon | £15 |
| – bought with Oddule | | £5 |

### SCANNERS, DIGITISERS . . .

| | | |
|---|---|---|
| ArcScanner including Epson GT-4000 | Clares | £1660 |
| Colour Converter | Lindis | £145 |
| FaxScan | Spacetech | £94 |
| GreyHawk | Wild Vision | £98 |
| Handipad | TechSoft | £193 |
| Hawk V9 MkII | Wild Vision | |
| – standard | | £199 |
| – hardware dithered | | £259 |
| HiVision Digitiser Colour | HCCS | |
| – A3000 External | | £137 |
| – A3000 Series / A4000 Internal | | £124 |
| – A5000 / 300 / 400 | | £124 |
| iMage (Sharp JX-100) | Irlam | |
| – for A5000 | | £490 |
| – for other computers | | £589 |
| Image Scanner | Iota | £383 |
| – Colour Upgrade Kit | Iota | £239 |
| – Fast Parallel Card | Iota | £98 |
| i-Scan 200 | Irlam | £539 |
| i-Scan 400 | Irlam | £589 |
| Pineapple Colour Video Digitiser | Pineapple | £195 |
| – A3000 boxed | Pineapple | £230 |
| ProImage (Epson GT6000) | Irlam | |
| – for A5000 | | £989 |
| – for other computers | | £1089 |
| Scan-Light A4 | CC | £277 |
| Scan-Light 256 | CC | £185 |
| – A3000 External | CC | £190 |
| – A3000 internal | CC | £190 |
| Scan-Light Professional | CC | £565 |
| – as above + SCSI interface | CC | £699 |
| Scan-Light Video | CC | £208 |
| SnapShot Colour Video Digitiser | Lingenuity | £195 |
| – A3000 version | Lingenuity | £275 |
| Spectra | RISC | |
| – A3000 Series / A4000 Internal | | £545 |
| – A3000 External | | £555 |
| – Archimedes / A5000 | | £545 |
| Vision Digitiser | HCCS | |
| – A5000 / 300 / 400 Mono | | £48 |
| – A5000 / 300 / 400 Colour | | £76 |
| – A3000 External Mono | | £60 |
| – A3000 External Colour | | £89 |
| – A3000 Series /A4000 Internal Mono | | £48 |
| – A3000 Series / A4000 Internal Colour | | £76 |

### MEMORY . . .

*Fitting extra unless otherwise stated*
*† Fitting fairly easy ‡ Fitting needs expertise*

| | | |
|---|---|---|
| A3000 2 Mb Upgradable † | Atomwide/IFEL | £43 |
| A3000 4 Mb † | Atomwide/IFEL | £100 |
| A3010 1-2 Mb | | £39 |
| A3020 / A4000 2-4 Mb † | IFEL | £POA |
| A310 2 Mb Upgradable soldered ‡ | IFEL | £88 |
| – as above + MEMC1a | | £113 |
| – as above + MEMC1a + fitting | | £143 |
| A310 4 Mb soldered + MEMC1a ‡ | IFEL | £152 |
| – as above + fitting | | £182 |
| A5000 2-4 Mb † | Atomwide | £85 |
| A5000 2-8 Mb including fitting | Atomwide | £500 |
| A5000 4-8 Mb including fitting | Atomwide | £391 |
| A540 4 Mb † | Acorn | £238 |

### PRINTERS . . .

| | | |
|---|---|---|
| ArcLaser 300-6 | Calligraph | £895 |
| ArcServer 300-8 | Calligraph | £985 |
| Bubble Jet BJ-10sx | Canon | £187 |
| Bubble Jet BJ-10sx + TurboDriver | Canon/CC | £219 |
| Bubble Jet BJ-200 | Canon | £282 |
| Bubble Jet BJ-230 | Canon | £315 |

*For ordering details please turn to page 3*

# ICS

## 051-625 1006

| | | |
|---|---|---|
| Bubble Jet BJ-300 | Canon | £325 |
| Bubble Jet BJ-330 | Canon | £380 |
| Bubble Jet BJC-800 + TurboDriver | Canon/CC | £1374 |
| DeskJet 510 | Hewlett-Packard | £275 |
| DeskJet 500C | Hewlett-Packard | £375 |
| DeskJet 550C | Hewlett-Packard | £525 |
| Laser Direct HiRes4 | CC | £899 |
| – 250-sheet Paper Cassette | | £99 |
| Laser Direct HiRes8 | CC | £1275 |
| Laser Direct HiRes Board | CC | £325 |
| New toner cartridge for Canon LBP-4 | | £59 |
| New toner cartridge for Canon LBP-8 | | £75 |

### COMPUTERS . . .

| | | |
|---|---|---|
| A3010 Action Pack | Acorn | £335 |
| A3010 Learning Curve System | Acorn | £599 |
| A3020 FD System | Acorn | £650 |
| A3020 HD60 System | Acorn | £775 |
| A4 2M FD System | Acorn | £1350 |
| A4 4M HD60 System | Acorn | £1650 |
| A4 Battery Pack | Acorn | £53 |
| A4 Shoulder Bag | Acorn | £37 |
| A5000 2M HD80 Multiscan System | Acorn | £1225 |
| Pocket Book | Acorn | £210 |

### MISCELLANEOUS. . .

| | | |
|---|---|---|
| 386 PC Expansion Card 25 MHz | Aleph One | |
| – 1 Mb | | £POA |
| – 4 Mb | | £POA |
| 486 PC Expansion Card | Aleph One | |
| – 1 Mb | | £POA |
| – 4 Mb | | £POA |
| 4-slot 4-layer Backplane | IFEL | £52 |
| 5315 Monitor | Aydin | £425 |
| A300/400 Fan kit | ICS | £15 |
| A3000 Expansion Box | Wild Vision | £135 |
| A310 RISC OS Carrier Board ‡ | IFEL | £18 |
| A5000 Fitting Kit for second hard disc | ICS | £15 |
| A5000 105 Mb Removable Disc Kit | | £POA |
| – Extra 105 Mb Disc | | £POA |
| Arckey Function KeyStrip Holder | ICS | V0 £3 |
| – pack of 4 | | V0 £10 |
| ArcNET | ACS | £69 |
| ARM3 ‡ | Aleph One/IFEL | £165 |
| Arm_Stick | Arm_Tech | £28 |
| ColourBurst | State | £374 |
| ColourCard | CC | £225 |
| – A3000 External | CC | £225 |
| Dongle Dangle with screw fittings | ICS | £6 |
| Fan filters (pack of 10) (not A5000) | ICS | £6 |
| FaxPack | CC | £289 |
| Floating Point Accelerator (A5000 + A540) | Acorn | £93 |
| Floppy Discs, 10 × 3½" High Density | | £10 |
| G16 True Colour Card | State | £258 |
| G8 Plus Accelerator | State | £238 |
| HiPoint Mouse for A4 | Genius | £49 |
| Microlin fx Pocket Fax Modem | Pace | £179 |
| Micro Mouse | Clares | £26 |
| Monitor Stand for A3000 | ICS | £21 |
| Mono/SCSI | Atomwide | £48 |
| Podule Case for A3000 | HCCS | £16 |
| Printer Port Sampler | Leading Edge | £42 |
| Printer/SCSI | Atomwide | £74 |
| Publishing Pack | CC | £475 |
| Revolution CD-ROM | Morley | £295 |
| Revolution Pro (for SCSI system) | Morley | £435 |
| RISC OS 3 Upgrade | Acorn | £45 |
| – A5000 | Acorn | £25 |
| Seal 'n Type spill-proof Keyboard Covers | | |
| – Archimedes / A5000 | Kador | £14 |
| – A3000 | Kador | £14 |
| TouchWindow | Lindis | £234 |
| Whisper Fan Quietener (for A300/A400 series only) | ICS | £15 |
| Wizzo IDE Filing System on rom | ICS | |
| – Wizzo4 for A4 | | £POA |
| – Wizzo5 for A5000 | | £39 |

*"You wonder how you ever managed without QuicKey."*
**NOW ONLY £10**

*"Congratulations on ColourSep! The results, compared with the drivers currently available, are bordering on the fantastic."*
**NOW ONLY £15**

*"TWO is the best thing I've ever bought."*
**NOW ONLY £10**

*As well as letting you type all those extra characters, Special is the easiest way to examine new fonts.*

*"DrawBender is quite stunning."*
**NOW ONLY £10**

*Padlock is our top seller for simple disc security.*

*"Fontasy offers a wider range of effects than FontFX. It is a package for the perfectionist, whether professional or enthusiast."*
**NOW ONLY £15**

## HOW TO ORDER

**VAT:** Zero-rated items are marked V0. UK customers please add 17.5% to all other prices. EC customers outside the UK (including BFPO) please do the same unless you are VAT registered, in which case quote your international VAT number. Ours is GB 595 7258 84.

***CARRIAGE IS FREE WITHIN MAINLAND UK IF YOU PAY ON ORDERING.***

**Overseas carriage:** If you are paying by credit card we will add airmail and insurance at cost. Otherwise please add £6 (Europe) or at least £12 (elsewhere) for each software item and send a pounds sterling bank draft payable at a London clearing bank, or Eurocheques for not more than £100 each.

**Credit cards** are welcome. We do not charge your account until your order is fulfilled. Your name and address must be as known to the credit card company. If you are leaving an order on our answering machine please include your telephone number, the expiry date of your card, and your calculation of the total payment due. We will make no charge for credit card commission unless we have informed you first.

**Official orders** are welcome from UK government and educational institutions. Payment is due in 14 days. Invoices are subject to carriage and late payment charges.

**Site licences** are available for most products. Please check our prices.

All products, prices and specifications are offered in good faith and are subject to change without notice. We process all orders immediately, but suppliers do sometimes keep us waiting. Goods are guaranteed but we do not supply them on approval. Returns and cancellations can only be accepted by prior agreement and there may be a charge to cover the costs involved.

*AUTHORISED ACORN DEALER*

**ICS (Ian Copestake Limited)**

**Dept AW23, 1 Kington road, WIRRAL, Merseyside, L48 5ET**

**Tel: 051-625 1006 Fax: 051-625 1007**

E&OE D61 93ASE08

LICENSED CREDIT BROKER

# Acorn introduces new A5000 and shaves prices

**Acorn has announced a new, faster version of the A5000 - as exclusively predicted in the August issue of Archimedes World. The new, upgraded machine has not been renamed or had any cosmetic changes whatsoever.**

However, under the cover is a new 33Mhz ARM3 microprocessor that replaces the 25Mhz version in the original. The new machine is also more upgradable than its forerunner and includes the ability to easily install 8Mb of RAM without the need for expensive upgrades.

This faster A5000 replaces all previous machines with the entry level configuration of 2Mb RAM and an 80Mb hard drive being priced at

£1275.74 (plus VAT) and £1445.96 (plus VAT) for the 4Mb, 160Mb HD unit.

Acorn has also introduced three new software bundles and price reductions on the A3010 machine. This can now be bought for £399 including VAT, representing a saving of over £100 on the old price.

During a recent press launch, Acorn let it slip that a new chip under development by ARM Ltd., the IOMD (referred to as the I/O C20 in a recent issue of Electronics Weekly) would allow greater compatibility with other microprocessor systems. It is thought that the new machine that Acorn is developing will have an extra socket on its circuit board to accept an Intel microprocessor so that both RISC OS and DOS/Windows or possibly Windows NT applications can be run simultaneously on one machine. It is also thought that it will be possible to install a second ARM processor into this slot to enhance the machine further.

## IT for Wembley

**Acorn's stand at the Acorn World '93 show, to be held at Wembley Exhibition Centre on October 29th-31st, will emphasise the company's leading position in the education sector. Based around the theme of 'IT in Action', there will be a number of displays to demonstrate innovative uses of IT in schools.**

A highlight sees Superchoice providing an abseiling tower, which will be constructed within the exhibition hall. Children will be invited to descend the tower while being connected by sensors to an Acorn system. This will monitor pulse and respiration rates generated by the children's' bodies while under stress.

There will be a 'Secondary School Focus', displaying Acorn's DIY Replay full motion video technology, with pupils from local schools showing how they have used the system and the pupils will also be demonstrating a 3D CAD/CAM package, creating architectural designs and cost analyses.

Representatives from Acorn in Education Centres will be on hand to offer advice to parents and teachers.

# ROM service

**Two new CD-ROM drives, aimed specifically at Acorn machines, have hit the market.**

The first comes from Morley Electronics of North Shields. Called the Revolution, it is a collaboration with Sony UK, providing a 'plug-in and go' CD ROM drive for just £299 excl. VAT. It is specifically intended to satisfy specific education criteria, being low-cost and easy to use, the owner simply plugging in the interface and drive. It is a multi session capable drive and is Replay and Kodak PhotoCD compatible. The drive operates via Acorn's CDFS and can access DOS based discs, running them through emulation. Cumana has also released a new PhotoCD compatible drive, with prices starting at £299. Known as the 300 series, the new drive is fully Acorn compliant and can operate in double speed mode at 300 K/s. It is also multi session capable and offers an access time of 320 milliseconds (random access) with a 64 K buffer.

Morley can be contacted on 091 257 6355, while for more information on Cumana products, ring 0483 503121.

## News Brief

### Up with the times

Soft Teach Educational has released the latest version of it's History study program, Time Lines 3.0, for the A3000, A4000 and A5000. It has plenty of new features, but retains the basic principle of earlier versions, with a time line linked to a chronological stack of cards. A sample database for tutorial purposes comes with the package, as well as two extra databases dealing with key stages 2 and 3 History Study Units. These can be used as they stand, since they contain at least six entries on each of the core study units, or can be added to or changed with new information. Time Lines 3.0 has a complicated price structure, ranging from an upgrade for a Junior school at £20, to £250 for the full version and a college site licence. Contact Soft Teach Educational 0985 40329.

### Action Replay

**The Acorn World 93 show at Wembley on 29th-31st October will witness the first public demonstration of Irlam Instruments' Replay Plus, a hardware upgrade that improves the image quality of movies captured by the Acorn Replay DIY kit.**

To compliment the hardware, there is new software as well and features include several new movie formats, time lapse recording, improved movie editing and better sound. Sound samples can be created in Armadeus, Microsoft Wave or Creative VOC (Soundblaster) formats, or direct to sound only replay files. Replay Plus is priced at £139 excl. VAT.

Also demonstrated at the Irlam stand will be a professional sound sampling card, which records direct to disk. 16 bit stereo samples at up to CD or DAT sampling rates can be captured and played back through the card. Cost including hardware and software is £299 excl. VAT.

Contact Irlam Instruments on 0895 811401.

ICS WIZZO (it's magic)

051-625 1006

### *The ideA range*

ICS was the first company to offer IDE products for Acorns back in 1990; now they are the standard choice for new Acorn computers. Building on three years' experience we have continually improved our IDE filing system. It now offers the highest level of RISC OS compliance, and compatibility with at least 45 different hard discs tested by us. Can any other supplier make this claim?

Our IDEFS abolishes the RISC OS limit of 512 Mb, and offers extra features such as password protection, background operation, disc partitioning, and power saving (which allows some discs to stop spinning when idle).

Partitions can have different levels of protection. Family or pupils can access some of your files while you keep others safely out of their reach. Or you can simply protect the whole disc (reformatting is not required for this).

Our hard disc upgrade kits are based around two internal interfaces at present: IDEA3IN for the A3000 Series, and IDEARCIN for the A300/A400/A500 Series. All kits are designed to a high standard and include all the parts you will need.

IDEA3IN upgrade kits include an I²C expansion socket as standard. They come with a 2½" disc already attached, and are easy to fit once you have opened up your computer. You may safely disbelieve rumours spread in the past (by sellers of SCSI hard discs) that internal upgrades might not be safe in an A3000. We have adhered carefully to the guidelines in Acorn's technical specifications, and in three years have never come across a problem.

IDEARCIN upgrade kits provide a fast 16-bit link all the way from the computer to the hard disc. They can even be fitted to an A310 without a backplane – quite a cost saving. A second hard disc can easily be added later if required.

Interfaces and hard discs can also be bought separately. By shopping around you may even save a few pounds. But beware: not all IDE hard discs work with all interfaces, and if you have a problem it may be difficult to decide who should put it right. We recommend buying a complete kit from one source.

WIZZO is the name given to our IDE filing system when it is supplied as a single rom chip. Wizzo5 is for the A5000, and Wizzo4 is for the A4. You should buy a Wizzo if you need password protection or wish to use larger hard discs. (Wizzo4 has been delayed slightly – we are adding a feature to ensure compatibility with possible future A4 upgrades).

A Wizzo rom by itself will only produce a slight speed improvement. If you need speed in an A5000, fit an IDEARCIN interface instead. Up to 60% improvement can then be achieved, but this does depend which hard disc you use so do check with us first.

### *How to read our ideA product references*

A number at the end is the nominal hard disc capacity in megabytes. We usually round this down, so the actual formatted capacity may be higher. All discs have auto-parking. Average access times vary but all are below 20 ms.

All prices shown exclude VAT and are subject to change without notice. The cost to us for hard discs can vary enormously from week to week – not always downwards! Your local dealer can obtain *ideA* products from us or from a distributor.

### Archimedes A300/A400/A500 Series Internal Upgrades

*Package includes formatted hard disc, ideA interface card, hard disc cradle and fittings, fan kit, replacement multi-purpose LED (power and drive status), manual with fitting instructions. Can be fitted to an A310 without a backplane. If a backplane is used it must be a 4-layer type. Easily fitted by most users.*

| | | | |
|---|---|---|---|
| IDEARCIN 40 | £175 | IDEARCIN 330 | £399 |
| IDEARCIN 80 | £205 | IDEARCIN 420 | £499 |
| IDEARCIN 170 | £275 | IDEARCIN 540 | £650 |
| IDEARCIN 240 | £325 | IDEARCIN 1000 | £925 |

### A3000 Series Fully Internal Upgrades

*Package includes formatted hard disc mounted on ideA interface card, manual with fitting instructions. Fully internal, using internal expansion slot. Co-exists with floppy drive and memory upgrades. Fits the new 1992 computers. Easily fitted subject to Acorn warranty stipulations.*

| | |
|---|---|
| IDEA3IN 40 | £175 |
| IDEA3IN 80 | £250 |
| IDEA3IN 120 | £299 |
| A3000 FAN KIT (not usually required*) | £19 |

**Only required if the computer has been fully upgraded, e.g. with maximum memory AND Econet AND an external podule.*

### Separates for hard disc upgrades

*We can only guarantee the performance of ideA interface cards with hard discs we have tested ourselves, so please check if in doubt. If you are buying a hard disc for an A5000 please say so. If you intend to fit the disc in addition to an existing one we need to know the make and model of the existing disc. Acorn's interface does not support all makes of disc, and some models will work as a second disc but not on their own.*

*Hard discs on their own are listed as, for example, IDEA 80. An S at the end indicates a 2½" disc.*

| | |
|---|---|
| IDEARCIN (Archimedes Interface for Internal disc(s)) | £60 |
| IDEA3IN (A3000 Interface for Internal disc) | £75 |
| ARCHIMEDES INTERNAL CRADLE KIT | £15 |
| ARCHIMEDES A300 / A400 SERIES FAN KIT | £15 |
| 4-SLOT 4-LAYER BACKPLANE | £52 |
| POWER CABLE FOR SECOND HARD DISC | £5 |
| A5000 SECOND HARD DISC FITTING KIT | £15 |

| | | | |
|---|---|---|---|
| IDEA40 | £125 | IDEA330 | £349 |
| IDEA80 | £155 | IDEA420 | £449 |
| IDEA170 | £225 | IDEA540 | £600 |
| IDEA240 | £275 | IDEA1000 | £875 |

| | |
|---|---|
| IDEA40S | £115 |
| IDEA80S | £190 |
| IDEA120S | £239 |

### WIZZO IDE Filing System on rom

*Package includes rom, manual and fitting instructions. Compatible with RISC OS 3.0 and 3.1. Allows up to four logical partitions over two physical drives. Each partition appears separately on the icon bar and can have different password protection. Makes use of existing Acorn hardware for maximum compatibility, but works with a wider range of hard discs. Security breaches using ADFS can be prevented. Can be fitted easily by a competent user.*

| | |
|---|---|
| *Available now:* WIZZO5 for A5000 | £39 |
| *Available soon:* WIZZO4 for A4 | POA |

Quantity discounts available • Dealer enquiries welcome

ICS (Ian Copestake Limited), Dept AW23, 1 Kington road, WIRRAL, Merseyside, England, L48 5ET

# Gonna make you a Star

**Star Micronics has announced the launch of another addition to its range of printers. Called the SJ-144, it is a compact lightweight thermal transfer printer, and will retail at £569. Aimed at business presentation users, it has an output rate of three pages per minute and is intended to offer better quality printing than colour inkjet rivals, at a comparable price.**

The company has also announced new price structuring for its LS-5 series of laser printers, with savings of up to £350. The basic LS-5 now comes in at £609, the LS-5 EX is £699 while the top of the range LS-5 TT PostScript printer is now £999. Contact Star on 0494 471111.

# The winter campaign

**Acorn's big push for the Christmas market is to centre around an advertising campaign aimed at informing and educating the home computer buyer, rather than simply plugging the company's products.**

The marketing initiative, based on trade and national press advertising, gives consumers the opportunity to send for a free information video, presented by John Leslie from TV's Blue Peter.

The video shows Acorn's range of computers and other computer solutions targeted at the home computing market, giving a comparison of what is available to the buyer and explaining the decisions the newcomer to the market will have to make in order to get the set-up that is right for them.

Richard Percy, Acorn's Consumer General Manager says, "Most customers are familiar with games consoles, but wen it comes to picking a computer that will act as an interactive 'edutainment' centre for the whole family, the buying decision becomes more complex and daunting."

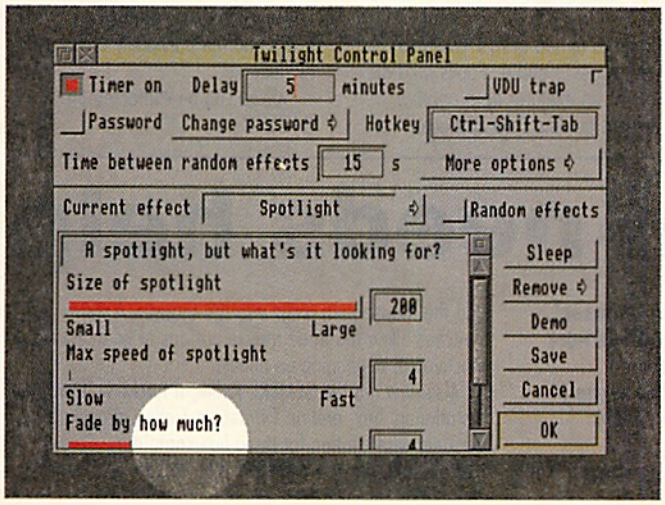
Designed along the lines of a computer game, the video follows the exploits of the 'Jackson family', as they pass through the various stages of buying a home computer to meet their entertainment, educational and home business needs. Sounds like a good idea, but maybe the choice of family name is a little unwise, in the light of recent events...

# Save our screen

**The Really Good Software Company has released an updated version of its Twilight screen protection utility, to take advantage of RISC OS3.**

The system can be set to display one or more of 17 screen saving effects, with many alterable parameters and can be used as a standalone, or in the Boot sequence on start up. It is network compatible and a site licence is available.

A demo version of Twilight is available for £5, which is deductible when the full product is purchased for £14.95. Contact The Really Good Software Company on 0582




## News Brief

### Pen pal product

Those with movement or other difficulties can now take advantage of a predictive typer for their Archimedes. Edinburgh based Design Concept has produced PenFriend, which offers word completion as its main feature, with users only having to enter the first couple of letters of a word, then completing the word with just one more key-press from a list of options provided by the program. Other features include an on-screen keyboard, for tracker ball users and support for speech synthesis.

PenFriend costs £25 for a single or site licence, plus £2 p&p. Contact Design Concept on 031 668 2000.

### Art attack

Micro Studio has announced the release of three new clip-art packs. The first two, Sport and Jurassic are suitable for all computers and contain pics of various sporting endeavours and terribly trendy dino thingies respectively. Each costs £29.95. Jurassic for ArtSchool is specifically for the ArtSchool package and costs £9.95.

Contact Micro Studio on 0353 720433.

### That's what gets Resultz

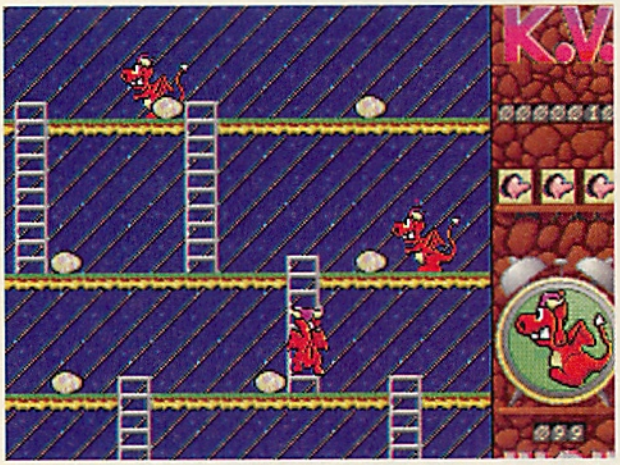
The second part of Colton Software's Fireworkz integrated suite of software, Resultz, has just been released. Following on the heels of the WP program Wordz, Resultz uses the same controls and design philosophy in a spreadsheet. It features full page based layout of data at all times, an easy to use button bar for the most common commands and background recalculation so there is no waiting around.

Fireworkz itself will be available later this year, combining all the tools and commands available in Wordz and Resultz. Resultz costs £119 excl. VAT and Colton can be contacted on

# What's your game?

**High Risc is the name of a new company in the Acorn software market, whose first release is entitled K.V. This involves a caveman running around a full hundred levels of platform game, collecting eggs and avoiding dragons. The game also includes a designer so you can make your own levels. It costs £15 incl. VAT.**

High Risc is based at 51 Mostyn Avenue, Syston, Leicester, LE7 2ET.



# Alpine scale new peaks

**Alpine Software has released three new products for the autumn, namely Creator II, Explorer and The Alpine Adventure Collection.**

Creator II is the updated version of the company's successful platform-style game production kit, with several new features. It allows for scroll text for professional demo writing and boasts a new bar graph facility for display of energy, shields and the like, along with a host of other functions to embellish design. There is an expanded user manual of over 100 pages and the program will now support multi level games, with each level loaded from a separate disk. Existing owners can upgrade for £20, while the whole package costs £49 excl. VAT.

Explorer is an educational program aimed at AT4 (Science) for key stages 3 and 4. Pupils take the role of an explorer from another galaxy, guiding their spacecraft around our own solar system to discover the secrets of space. There is a detailed database of facts, digitised photographs and information on all the planets. Explorer costs £30 excl. VAT, or £70 for a site licence. Finally, for a price of £15 excl. VAT, The Alpine Adventure Collection consists of Plague Planet, COPS and the previously unreleased Kidnapping.

Alpine can be contacted on 0762 342510.

# Special needs help

**NW SEMERC has released its new 'Mouser', designed to help young children and learners with a physical handicap. The mouser prevents the user from pressing the wrong buttons on the mouse and inadvertently bringing up menus on the screen.**

It plugs into the mouse socket on any series A machine and the mouse then plugs into the mouser. A series of switches allow the three mouse buttons to be activated or inactivated, depending on needs.

Also new are the SEMERC Roller, a trackerball set into a stationary box, and an Extendible Trolley, providing a versatile work station for three box computers. Contact NW SEMERC on 081 547 3418.

## Move on up

**Minerva has announced the launch of PrimeMover, a new animation system for Acorn RISC OS machines. Described as more than just a sequencer for hand drawn frames, the system allows the creation of frame sequences for simple animation and takes this one step further by enabling these animated sprites to be moved about on the screen using a simple user interface. Prime Mover uses a real time system for its animation control and the user is able to specify actual times at which events occur, or periods over which movements take place. Recommended retail price is £79.95 excl. VAT.**

Also new from Minerva is the Sound Track Keyboard Trainer, a package containing more than sixty structured games aimed at teaching MIDI keyboard skills to young musicians. The program is design to satisfy the National Curriculum requirements for music in Primary schools, but is equally of use in the home environment.

For further information on these products contact Minerva on 0392 437756.

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Last week the Express reported on the complaints of management of Edgeley branch was not aware of manager on December 10 to make the views of the "The cage in which aluminium cans are stored was

# SCHOOL CHILDREN PROVE THAT NEW BYPASS WILL DAMAGE THE LOCAL ENVIRONMENT

EXCLUSIVE

BY MATTHEW DAVIES

**USING an innovative new program on their classroom computer children from St. Chad's School have shown town planners that a proposed new bypass would have a detrimental effect on their local environment.**

The children surveyed the local area and fed details into their Topographer program, which allows them to look at the relevant area in 3D. They then added the new road along its proposed route and it became obvious that the road would not only affect an area renowned for its badger population but would also distract children in the classroom as they would be able to see traffic moving along the new road.

The children even went as far as to propose a new route for the road to the town planners. The proposed route would have a negligible impact on the area but still provide the much needed relief to existing roads.

**A SERIES of sweeping proposals which would abolish free parking in district shopping centres, change some bin collections, increase lettings charges and scale down mileage claims by some council officers, have been announced by Labour.**

In the first indication of their intentions si
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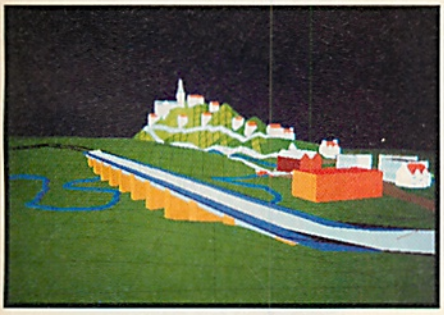
*Topographer* is a major application for the Geography curriculum which allows children (and teachers) to have lots of fun whilst learning all about maps, contour lines, valleys, rivers etc. In fact *Topographer* covers virtually all items found on a map.

The real break through with *Topographer* is its 3D section which allows you to convert a 2D map into a 3D model on screen. Imagine turning a set of flat contour lines on a 2D map into a 3D model which clearly shows the hill — no more cardboard cut out models or papier mache! You define where you look from, and what you look at.

*Topographer* also covers aspects of the IT and maths curriculum with its modelling capabilities. Just stop for a minute and think of the projects that you could do with *Topographer*. You could make a map of the local area with churches, pubs, woods etc. and then view it from various places. If there is a bypass proposed you could add it in to the existing landscape and see where it is visible from and what impact it is likely to have on the community. I'm sure you can think of a hundred and one topics.



◆ Fully RISC OS 2 & 3 Compliant and 1 megabyte friendly ◆ Suitable for all ages from 6 onwards ◆ Easy and quick entry of all symbols (over 100) ◆ Wooded areas which translate into impressive 3D landscapes ◆ Definable map size and scale which can be linked to the national grid references ◆ Powerful 3D mode giving a true representation of the landscape ◆ Stunning 3D models which can be saved as a sprite file for use with other applications.

£79.95 inc. VAT

*All specifications subject to alteration without notice*

AVAILABLE • APRIL 1ST 1993

CLARES

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# A NEW DAWN FOR ALMANAC

SEEN A
ACORN WOR

- Complete home accounts
- Records span any number of years
- Import/Export data
- Enter cheques and statements into Almanac on sceen instead of on paper.
- Impression support

- Correspondence tracking
- Auto linking to address book
- Company address book as well as personal address book
- Accounting and cost tracking
- Staff scheduling
- Time management
- Fax pack and Arc fax support
- Expense claim creation / printing / recording

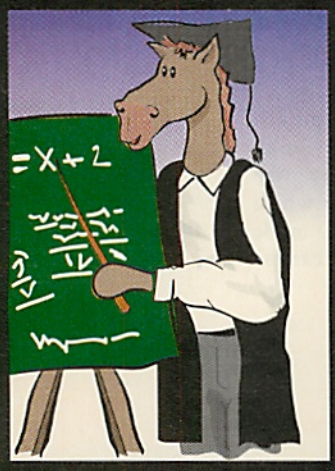
## WHAT THE MAGAZINES SAY...

**Archimedes World**
Almanac is a prime example of a good idea made better through a lot of thought and quality workmanship...Its power and flexibility means that it makes other packages completely redundant, it puts everything of a similar ilk well in the shade...**Almanac is a winner**...it has many features, all of which are easy to use!

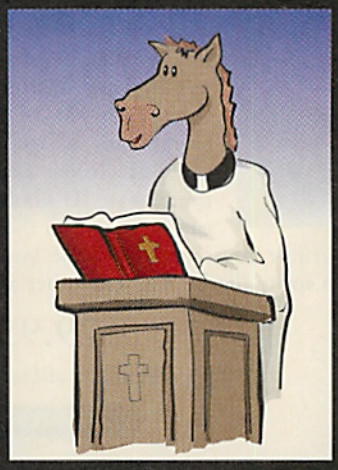
**Acorn Computing**
This is one package that will be used constantly.

**Acorn user**
Almanac is very easy to use, it is exceptionally powerfull and I have a feeling that once you've bought it, you'll wonder how you ever managed without it.

**Le Computer**
The most important product since Impression.




- Pupil records
- Attainment records
- Correspondence tracking
- Staff management
- Room scheduling
- Impression support for single 'drag & drop' of addresses from address book.



- Appointments
- Anniversaries
- Time management
- Resource scheduling
- Correspondance tracking
- Mailshot (+Impression)
- Resource scheduling

ALMANAC is available direct from Stallion Software Ltd at £85.00 inc + £2.50 p+p (Optional Filofax £23.50 inc). Almanac is also available from all good Acorn Dealers.

STALLION SOFTWARE

TEL. 0225 339090 or Fax. 0225 333090. Arundel House, Arundel Road, Camden, Bath, Avon, BA1

# DISK WORLD

*Your guide to this month's cover disk*

## Edit Plus

***Part two** of our instructions for Edit Plus, the application that adds style to Edit documents*

**Start Page number**
The Start Page number is the number that will be given to the first page of the document. This is used to number pages starting with a figure other than one.

**Pausing between pages**
The Page Pause is used if you are printing on non continuous paper and your printer doesn't have a sheet feeder. A window will pop up when Edit Plus reaches the bottom of each page so that you can insert a new sheet and click on OK. If you click on the close icon, you can bring it back by clicking Select on the Edit Plus icon.

**Line Length**
Line Length should be set to the same value used to format the lines in your original text file. When a file is loaded, it is searched for any lines that exceed this length and you will be warned if this is the case. This normally means that the text hasn't been properly formatted and probably won't print properly.

This value is also used to right align or centre text so it is important that it is correctly set.

Note that Edit Plus does not reformat any of your text so you must ensure that it is properly formatted before you try to print it.

**Paging on/off**
Paging is normally enabled. If it is off, all text will be printed continuously with no page breaks. When previewing, only hard page breaks are shown and it is not be possible to move them.

If paging is disabled, no headers or footers will be printed, although if any are defined their definitions will still appear as usual when previewing.

**Form Feed**
Form Feed will send a form feed code (ASCII 12) at the bottom of each page instead of a series of line feeds. This will be needed if you have a sheet feeder and is quicker if you are using fanfold paper and your printer has its form length correctly set.

To use this feature with fanfold paper the form length of your printer must be set to match the actual paper. If it is not correctly set, the text will become out of line with the page length. You will need to check with your printer manual to find out how to do this. Most printers can only have this length set by default to 11in or 12in so if you want to use A4 paper you will need to do it by sending the appropriate codes to the printer. You can either do this by including the correct codes on the Immediate menu or by inserting them as a pre-print sequence.

**Save page layout**
This option saves the current setup as defined in the Page Layout window to a data file in the application directory. This will be loaded automatically when you start Edit Plus so you can set it up as you wish.

**Restore page layout**
If you have used the Save page layout option, this function will reload the file. You may wish to use this if you have changed the page layout and want to restore your default settings.

No special methods are used to load and save individual page layouts because Edit Plus has a much simpler way of including this data within an individual file and this is described in the next section.

**The Preview Window**
If you select 'Preview' from the Main Menu, a window will open showing the current file. This enables you to see how your text will appear when it is printed, as page breaks, centred and right aligned text and other features introduced by Edit Plus will not be shown when you created the original file in Edit.

You can open the Page Layout window and alter the layout if you wish but changes will not immediately be reflected in the Preview window. To see the changes, close the Preview window and open it again.

**Window size**
The window will be sized so that it is four characters wider than the printed page so you should see a clear space down the right hand side of the window. This enables you to check that the line length in the Page Layout window is correctly set to the width used when you wrote your text. It will also clearly show any lines that are too long to fit properly on the page. Although you will be warned of this when you load a file, the warning doesn't show where the problem occurred but it can be clearly seen when previewing.

**Display format**
The left margin will be shown at the chosen width. If you are using a screen mode which is only 80 characters wide and your line length plus the margin exceeds 76 characters, you may wish to temporarily reduce the left margin to zero while previewing the text so that you can see it properly. If you do this, don't forget to restore it before printing or saving the file.

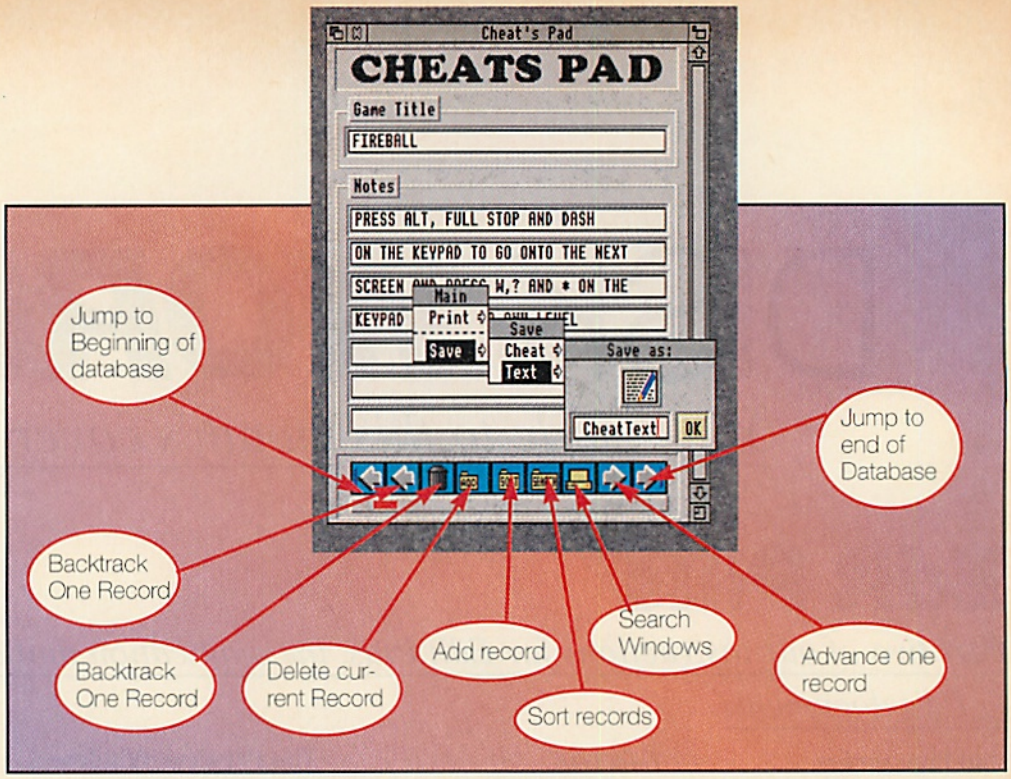
Page breaks are shown as a solid grey line across the window. Pale grey means that it is a soft break inserted by Edit Plus at the appropriate point. Dark grey means that it is a hard break inserted by the user.

The top and bottom space on each page is not shown and so headers and footers are not displayed on each page but are shown where they are defined in the text. Headers are shown in pale blue, footers in pale green.

You may have defined a blank header or footer at some point and this wouldn't normally appear, since there would be no text to show. If you have defined a blank line as a header or footer it will be shown as a series of '*'s in the appropriate colour.

Any characters which will be translated to printer codes are shown in red. This enables you to check that you have actually defined a code for the character in your Config file. For example, if you have defined a code sequence for the pound character, every time a pound appears in your text it will be shown in red.

Page numbers are shown in red as #?. Style codes are shown as normal characters in Edit which upsets the text formatting because when the file is printed they won't appear as characters. When previewing a style code character which has been inserted into Edit, text isn't actually displayed and the character following a style code will have an orange background. This means that the text will be correctly laid but you can still see that you have used a style code at that point.

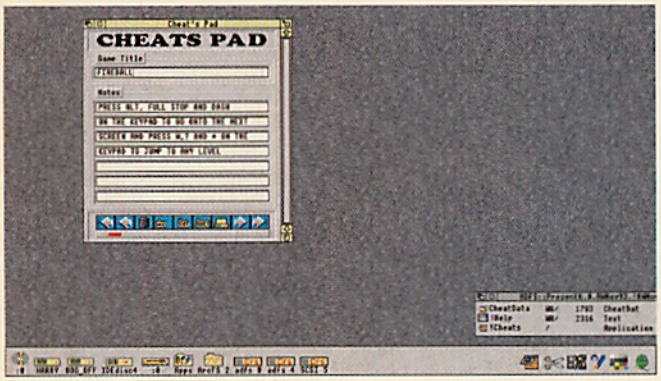



# Cheats

**Most of us play the occasional game, others are addicted to the things. This is shown by the overwhelming popularity of our Out of the Darc column.**

What this column also demonstrates is the need for a vast array of cheats for the popular software, as people inevitably get stuck or try to find the easy way out.

We often get phone calls asking for cheats and which issue hints appeared in. Not having the time to answer such requests, we were delighted to receive a copy of Cheats - the database specifically designed for storing and sorting hints and tips for games.




## Loading

Because it is database nature to write data to disk, its is vital that you make an uncompressed copy of Cheats and store it on a hard disk or separate floppy.

Cheats is a multitasking application that installs its icon on the icon bar when in use. To load it, simply double click on the Cheats application icon

## Using

The main menu from the icon bar icon provides just the two standard functions, Info and Quit. Press Select or Adjust on the Cheats icon on the icon bar to open the main Cheats window. This shows a note book like image that stores the hints and tips information. At the bottom of the window is a range of controls to help manage the database. Take a look at the annotated figure for an explanation of these icons. The bar at the bottom of the window shows the position of the record being viewed in relation to the whole file.

Pressing the Menu button while the mouse pointer is over the main Cheats window causes a new menu to appear. The Save option allows you to save the Cheats database as a data file for later use by the application. You can also save hints and tips as standard ASCII text so that you can read it in Edit or other compatible program.

The Print function requires a RISC OS printer driver to be loaded before any printing can be performed.

For example, if you had wanted the word 'tomorrow' to be underlined you would have inserted the code to start underlining before the word and the code to stop underlining after it. In Edit, this would be shown as *tomorrow* where the two *'s represent the code characters. When previewing the code characters wouldn't appear but the 't' would have an orange background and so would the space following the word. This means that tables etc. will be correctly shown and not displaced by codes as would be the case in Edit. Right aligned and centred text is shown properly formatted.

## The Preview Menu

If you click Menu over the Preview window its menu will appear. This has several items that enable you to modify the file and save the changes.

### Moving page breaks

The first two items on this will move a page break shown in the Preview window up or down one line. This enables you to adjust the position of breaks so they don't appear in the middle of paragraphs or other places where they are inappropriate. Just click on the item to move a page break. Note that there must be a page break actually displayed in the window. If there is more than one it will be the break nearest to the top of the window that will be moved. To move a page break more than one line click on the appropriate menu item with Adjust instead of Select so that the menu remains on screen and just click again until the page break is correctly placed.

You can move both hard and soft breaks. If you move a hard break it will be converted to soft and so may be altered again if you repaginate. If you try to move a page break down when it is already at the bottom of the page, you will not be able to move it and the computer will beep.

If you move a page break up, later page breaks will be checked and moved automatically if subsequent pages become too long.

### Repaginate

This recalculates page breaks for the entire file. All page breaks except hard breaks will be reset to the default positions.

The main reason for doing this would be if you have decided to alter the page layout in some way, for example to increase or decrease the size of the top of bottom space.

Don't forget that any page breaks that you might have moved will now be reset so you will need to go back to the start of your file and redo any changes you may have made.

# Enigma

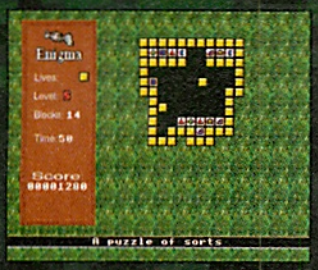
*Into the unknown*

**Every since Tetris came on the scene, block puzzle games have been the order of the day. Matching blocks, moving blocks, rotating blocks, eating blocks, sleeping blocks...**

Enigma is a game of more blocks. It is a strategic test of intellect that can offer hours of enjoyment. The object is to simply remove every playing block from each of the fifty levels. The blocks come in several forms and each displays a different picture on its white background. Blocks are removed by matching two or three blocks of the same type together. Match all the blocks on a level before you run out of time and you can proceed to the next stage.

## Loading

Enigma is configured to be run from a floppy disk only and should be decompacted and stored on a separate disk before use. If you intend to copy it to a hard disk, please refer to the hard disk installation instructions later in this text. Enigma should be loaded by double clicking on its application icon from a filer window. The game is not multitasking and will take over the entire screen display when in use.




## Playing

The game is entirely mouse controlled. Blocks are moved by positioning the mouse pointer over them and pressing the left or right mouse buttons to advance it in the respective direction. If there is nothing underneath a block when it is being moved, it will fall until it comes to rest. If a playing block is adorned with a large, red letter S, it is static and cannot be moved.

Various background blocks have special properties and later levels include lifts, throwers, warps, conveyers, transmats, and balloons. Lifts are used to move blocks vertically or horizontally around the screen. Putting a block onto a moving lift is easy, but with horizontal lifts, a little more skill is required.

If you move a block into a thrower, it will be hurled diagonally to the left or right, as indicated by the arrow on it. If you move a block into a warp, it will reappear elsewhere in the play area and conveyers will transport blocks horizontally, as indicated by arrows. Balloons are like horizontal lifts, but only move when you want them to. Watch out for spikes, black holes and acid drops, which destroy your blocks. Keep an eye open for crushers as well.

With the aim being to match every single block on a level, if any are destroyed, the level cannot be completed.

On later levels, even more complications are introduced. Water reservoirs spring leaks and each crack must be plugged before the final blocks are matched. The blocks cannot penetrate the water's surface, but if you match some blocks on top of the water, a sinkable block appears under the surface which can be manoeuvred to plug any leaks.

There are also special levels containing anagrams. At the top of the level is a row of red dots. As you match blocks, one of the dots is replaced with a letter, gradually making up the anagram of a word. When all of the letters have been revealed, they fall and can be moved as normal blocks. To complete the level, you must move all letter blocks into the space at the bottom of the level, rearranging them to form a word.

The game can be paused by pressing the space bar, whereby a menu will appear offering the choice of continuing with the level, losing one of your three lives and retrying the level, or giving up the game entirely.

The main menu contains options to start a game from level one, to see the high score table, enter a password (these are given to you on completion of a level), or exit the game. To mute the sound, press f1 in the main menu. To restore it, press f2.

## Hard drive installation

When Enigma prompts for insertion of a levels disk, it expects to find the 'levels' directory in the root directory. If, however, you want Enigma to find it somewhere down the directory tree of a hard drive, follow these instructions:

- Open the !Enigma directory by double clicking with Shift held down
- Load Edit and drag the Enigma !Run file onto its icon
- Locate the seventh line:

```
Set EnigmaLevels$Dir $
```

This tells Enigma where to find the levels file

- Swap the '$' for the pathname of the directory in which 'levels' resides, e.g.

```
Set EnigmaLevels$Dir
SCSI::HD4.$.Games.Enigma
```

I Save the !Run file with the Edit Save option

Enigma will now be configured to run off your hard drive. If an error occurs, check you have typed in the pathname correctly.

---

**Remove Codes**

This will remove selected codes from the text. The codes to be removed are selected from the sub-menu. As you click on the sub menu each item will be ticked or unticked. When you select 'Remove Codes' any items ticked will be removed from the file. Use this feature with caution. Once the codes have been removed they cannot be retrieved.

If you chose to remove all page breaks and paging is set, although they will be removed, as soon as you reselect Preview or Print soft page breaks will be reinserted.

If you choose to remove Headers and/or Footers, not only is the code that defines the Header/ Footer removed, but the entire line is deleted. Once again use this with caution because the line cannot be restored.

**Save File**

These options enable you to save versions of the file that are different from the original created using Edit. The file can be saved in two different formats, as an Edit Plus file or as Plain Text.

The Save window works in the usual way, but, unlike Save windows in most other applications there is no 'OK' box. This means that you cannot save the file by simply clicking on 'OK' or pressing RETURN. This is deliberate so that you can't accidentally save the file with its original name and overwrite an earlier file. You must actually drag the icon to a directory viewer. It is suggested that if you keep files in both text and Edit Plus formats you keep them in separate directories to avoid this possibility.

**Saving as plain text**

This saves the file as plain ASCII text, formatted as it will eventually be printed. If you want to be sure that it will appear as you intended without wasting paper then you can simply load this file back into Edit and examine it.

None of the Style codes or special character codes are included. All centred and right aligned text will be properly formatted. If paging is on, the page breaks will be included, either by the use of Form Feed (ASCII 12) characters or blank lines depending on the state of the Form Feed button in the Page Layout window. In this case the appropriate headers and footers will be included at the top and bottom of each page if they have been defined. If paging is off, there will be no page breaks of any type in the text and no headers or footers.

**Saving as Edit Plus file**

This is similar to the original but has codes inserted at the position of all

**Continued on page 20**

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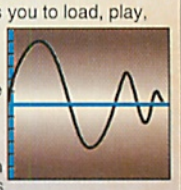

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# Crusader

*A day in the life of Skipper Bluck - Ace pilot*

**"Crzzzzzz!" pause.**

"Crrrrzzzzhhhh!"

"Hzcrrrzzzzzzzzzz," said the intercom.

Skipper thumped the black box and sent it scuttling across the flight deck of the JZ1 Super Stunner. Somewhat dazed, the intercom picked itself up and scurried back to Skipper's side and repeated its crackling.

"Crzzzzzz!"

"What?" yelled Skipper into the little hole that wasn't designed to be yelled into. The intercom squealed in

pain and crackled back into life.

"Skipper," it said, its small metal lips quivering to the voice that it was remotely receiving, "the blasted Wblwbs have broken through our supa-solar volumetric gas field and are attacking the planet."

Skipper gave a yawn that was clearly audible at the receiving end.

"Oh, please, Skipper. We need your help!"

"Not unless you admit that I'm a better pilot than you, Spanners."

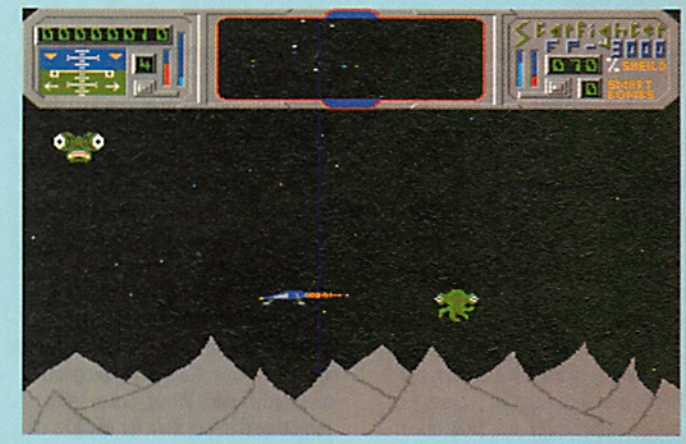
Spanners, who repaired interstellar craft rather than drive them was only too pleased to agree to his colleague's request, but the conversation continued with ever ridiculous demands until, finally, Skipper agreed to rise to the challenge after having received a written notice from Spanners declaring that he was not only the best pilot in the entire galaxy, but also had the biggest collection of jelly babies outside of Beta Lyra.

Spanners, tired of the stupidity, closed the transmission by hurling his small intercom robot against a padded hurl cushion, as this was an accepted method of signing off. The hope was that the intercom robots would, one day, learn who the user wanted to speak to and who had been sent to Coventry and politely report that they were unavoidably otherwise engaged in Jelly Baby swapping or some other vital role.

Skipper jumped to his feet and ordered his standard issue JZ-1 Super Stunner boots to give themselves a quick brush-up; he didn't want to go into battle looking shoddy. Quickly attending to his quiff whilst he swivelled around to the flight controls, he flicked a few switches and inserted the Archimedes World cover disk. Stealthily decompacting the Crusader game to a separate disk (whilst following the instructions found in the Disk World section of a popular magazine) he proceeded to load the game by double clicking on its application icon.

The main engine boosters fired up, propelling the ship into hyperspace and through the supa-solar volumetric gas field, down to the planet's surface and into the thick of the fighting.

Deftly controlling the ship using the Z and X keys to manoeuvre it left and right whilst pressing the ' and / keys for vertical movement, he took out the bad guys by jabbing at the Return key and occasionally hitting the strategically placed space bar to launch a smart bomb. Thrusting out of the mayhem using the left and right Alt keys, Skipper went in search of more enemy Wblwb ships. Remembering his mission, Skipper



located more pods in distress on his scanner and thrust off to rescue those in mortal peril. Not wanting to lose any credits, he was particularly careful not to destroy any Statis pods with his cannon fire. He also remembered Spanners saying that any pods that were successfully stolen by the Wblwbs would result in the loss of 50 credits.

"Aha, there you are," muttered Skipper as he witnessed a Wblwb ship sneakily stealing a Stasis Pod. Skilfully manoeuvring his ship, he let loose a barrage of cannon fire that sent the alien ship to oblivion. Acting quickly he positioned the ship so that it could collect the pod and deftly returned it to the planets surface whilst watching his account being credited. A smile came to his lips as he sped off in search of more kipnappings.

Watching from way above the planet's surface, the mothership could stand no more. Having witnessed the annihilation of its task force, it silently began re-entry, swiftly dropping towards the surface, powering its shields and readying its vast array of weaponry.

Suddenly, from out of the clouds, Skipper caught a glimpse of the huge bulk as it descended. Disregarding

the imminent danger, he began blasting away at the awesome tin bulk. Dodging the machine's return fire, Skipper aimed once more and let rip with his laser cannon. Smoking and spluttering, the hulk let out a few final bursts of energy when it exploded in a shower of sparks, sending Skipper's ship flying, riding on the explosive energy of the dead mothership.

Having completed his mission, Skipper turned to the intercom robot and called Spanners. "I got some good news and some bad, Skipper," chortled Spanners. "You've successfully cleaned up the planet, but the Wblwbs have seized control of a further 99 planets in our system. You're our only hope."

## Controls

| | |
|---|---|
| **Ship navigation** | |
| Z | Left |
| X | Right |
| ' | Up |
| / | Down |
| Left Alt | Thrust and face left |
| Right Alt | Thrust and face right |
| Return | Fire |
| Space Bar | Smart bomb |
| **Other controls** | |
| P | Freeze Play |
| Q & F12 (pressed together) | Quit current game |
| F1 | Sound On |
| F2 | Sound Off |
| **Title Screen controls** | |
| Space | Play Game |
| Return | Advance to next title page |
| I | Instructions/scenario |
| P | Enter Password |
| Esc | Return to desktop |

# TextCheck

*It's a matter of style, and TextCheck can keep you on the straight and narrow*

**To err is human, as the saying goes. Any author will tell you how easy it is to include double spaces in a typed document, accidentally use upper case letters where they're not needed and make other errors associated with typing.**

The long way around the problem is to learn to type properly, to reduce the number of mistakes in text, but this is a time consuming process that can be stupefyingly dull. How about an easy way out?

TextCheck is a useful application that will help anyone who writes articles, essays or just an occasional note. It has the ability to check straight ASCII file, 1stWord+ and PipeDream documents for typing errors that a standard spelling checker wouldn't pick up.

## Loading

TextCheck is a multitasking application that functions from the icon bar. For safety's sake, it is advisable to make an uncompressed copy of the application and any related files before loading. See details elsewhere in Disk World for details.

Load TextCheck by double clicking on its application icon.

## Using TextCheck

Once the TextCheck icon has been installed on the icon bar, click on the icon with Select to display the Options window. This allows you to set a number of functions such as the analysing of letter cases and the number of spaces or lines between paragraphs, words, commas and full-stops. A default selection causes the options to revert to the factory defaults, handy if you get in a muddle. The options can also be saved to disk for later use.

To get TextCheck to perform its functions on a text file (ASCII, 1stWord+ or PipeDream) you need only drop the file icon on the TextCheck icon on the icon bar. The program then looks through the file's contents and adds spaces, new lines, capitals, etc., to make the file more presentable. TextCheck can also be set to search for words that should have capital letters.

When the program has finished processing, a save window is displayed for you to drag the save icon to a destination filer window. While the save window is present you can get info on the file by following the Info, File path from the main menu. If you try to save the reprocessed file over your original, you will be asked for confirmation. This is a practice that is not recommended, but, if you insist, always check the new file before deleting the old one. Neither the programmer, Archimedes World, nor re-seller can be held responsible for any loss of data that may arise from the misuse of this software.

## Menus

Clicking with Menu on the icon bar icon will display the main menu. This contains a number of items and is detailed below.

### Info

The Info option opens a sub-menu where you can get information either on the program or a processed file. The window for information on a processed file shows the length, filetype and name of the file, together with whether the letter cases were checked and how big the dictionary is.

### Options

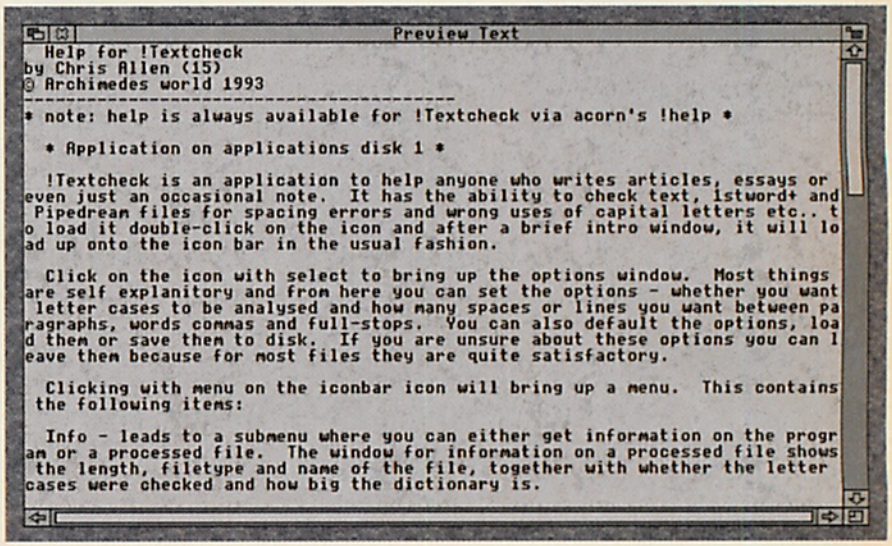
This function opens the Options window and is an alternative method to clicking with Select on the icon bar icon.

### Add word

The Add Word option opens a new window that allows you to add words to the program's dictionary. This is used to give appropriate words capital letters if the option is chosen from the options window. Enter the word into the writable icon and click on the Use button. In this instance, the word will not be saved and quitting the application will cause the word to vanish.

If you click on the Save button, the word will be saved to disk so that it can be used next time you run TextCheck. Please note that you will not be able to save any words if you are running TextCheck from the compressed archive on the cover disk.

An alternative method of adding more words to the dictionary is to load the Capitals file into Edit or a similar text editor and enter words following the original format of the file. Naturally, you will need to ensure that you spell your words correctly and use capital letters where required. The only other proviso is that the words are stored in alphabetical order.




### Preview text

The Preview Text option is only available if a file has been processed and the save window is open. Its purpose is to give a rough idea of how the file will look before you save it. If the file is from either 1stWord+ or PipeDream, it may not be displayed correctly. Do not assume the display to be 100% correct.

### Multitask

The Multitask option allows you to choose whether you want files to be processed in a multitasking environment or not. If a file is dragged to the icon and this option is on, the Progress window will open and proceed to show how far the program has got through the file and how much further there is to go (in percentages). You can continue to use the desktop as normal and the processing is done in the background.

If the option is not set, the desktop will be paused while the file is processed and is considerably faster. An hourglass with the percentage of file processed will appear while it is processing.

### Quit

This quits the application and asks for confirmation if it contains unsaved data.

## Other menus

Clicking with Menu on the Options window causes a new menu to appear. This is identical to the icon bar menu except that the Options entry leads to a sub-menu. This allows you to load, save or select the default options.

If you click with Menu on the Progress window whilst TextCheck is processing, apart from the standard Info and Quit options, you can also opt to Abort the processing. The application will ask for confirmation before proceeding with your request.

Clicking with Menu on the Preview Text window causes another short menu to appear. The usual Info and Quit options are present and accompany a Reprocess option. Clicking Select on this causes the application to reprocess the original file - useful if you have changed some options.

# Dragon Ball

*Brick blasting fun and a saving of £15 into the bargain*

**This month, Archimedes World brings you a free copy of DragonBall, a highly addictive Breakout style game with lots of extras. Using your bat, you must destroy various arrangements of bricks by bouncing a silver ball around the screen. When the ball hits a brick, it disintegrates and the ball is deflected.**

The brick wall may contain stone bricks which are indestructible, or bricks that require more than one hit to destroy. You will also encounter pinball bumpers that deflect the ball in a random direction. To aid you, some of the bricks hide power-up crystals and collecting these as they fall will enhance your bat.

## Loading

Double click on the DragonBall application icon from within a filer window to load the entire game. Start the game by pressing the left mouse button at any time during the intro screens.

## Playing

The bat is controlled with the mouse. The left button also releases the ball, fires the guns, releases fountain balls, etc. The right button pauses the game and quits to the desktop from the intro screen. Pressing all 3 mouse buttons during the game will return you to the title screen.

## The Wall

### Rounded Bricks

These come in six colours, and require only one hit to destroy. Each brick destroyed is worth 5 points.

### Bevelled Bricks

The colour of these denotes the number of hits needed to destroy them. When hit, they change colour to indicate the number of hits remaining. The colours cycle in the following order; Purple, Red, Yellow, Green, Cyan, Blue. The blue bricks require only one hit to destroy. Each hit is worth 5 points.

### Stone Bricks

These are used to create boxes, mazes, etc. Stone bricks are indestructible, and may cause the ball to be deflected at a random angle.

### Pinball Bumpers

Cause the ball to fly off in a random direction. Worth 50 points a hit.

## Crystals

Crystals appear on bricks at the bottom of the wall. They fall when the brick holding them is hit. To collect the crystals, catch them on the bat, but watch out for the ball. The effect of some power-ups can be increased by catching more than one crystal of the same colour. Collect a different coloured crystal and the previous power up is cancelled. The crystals collected are displayed between levels and are carried over onto the next level.

### Purple

The Bomb. Effortlessly defeats the wall, sending you onto the next test.

### Red

The Cannon. Twin lasers which hit the wall with the same effect as the ball. Fire rate may be increased with extra crystals, e.g. two bullets on-screen with one crystal, up to eight bullets on-screen with four. Use left mouse button to fire.

### Yellow

This increases the strength of the ball, causing it to destroy more than one brick before being reflected. Two bricks/colour changes with one crystal, up to eight with four crystals. But beware, each yellow crystal held substantially increases the maximum speed of the ball.

### Green

Glue. Makes the ball stick to the bat until the left mouse button is pressed.

### Cyan

Triple Ball. Catch this, and the ball splits into three identical balls, only one of which need be kept aloft.

### Blue

Fountain Ball. Releases a blue ball every time the left mouse button is pressed. These act in the same way as the silver balls, but vanish after a few bounces. Their life may be extended by catching extra blue crystals. There is no limit to the number of blue balls on the screen, but be careful not to lose track of the silver ball!

### Grey

Speed Control. The yellow 'S' marked crystal causes the ball to speed up, the blue, reversed 'S' marked crystal slows the ball down. Unfortunately, the slow down effect is not permanent and the ball will soon speed up again!

### Small Bat

Extra Life. Catch the crystal which looks like a small version of your bat to claim an extra life. Extra lives are also awarded every ten thousand points.

## The bonus rounds

### Cyan Dragon

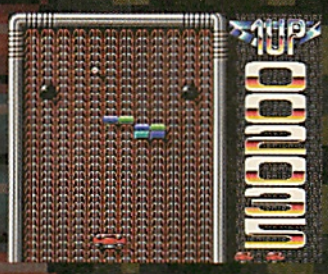
First appears at level 5 and every ten levels thereafter. He will move across the top of the screen showering you with coins worth between 10 and 50 points each when caught. Collect all the coins for a thousand point bonus.

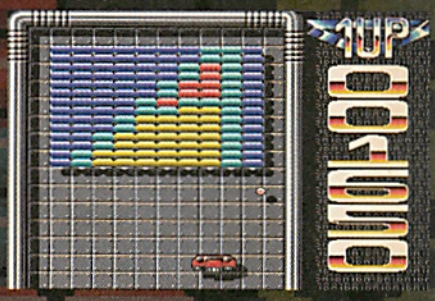
### Purple Dragon

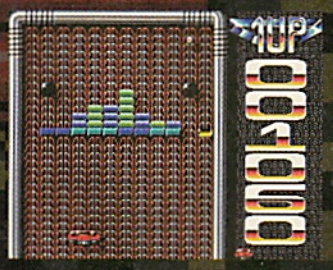
Appears at level 10, and every ten levels thereafter. Tries to destroy you by dropping explosives onto your bat. To rid yourself of the purple dragon, bounce the silver balls back into his mouth, while dodging the falling bombs and steering clear of the resulting explosions. Hit him enough times without being destroyed yourself to win an extra five thousand points.

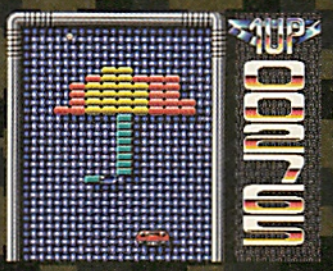
### Red Dragon

Your captor who appears at level 100 and is not playing games. His bombs are deadly, and will remove one of your precious lives. So use your skill and the silver ball, to destroy him and escape by hitting his open mouth.





continued from page 15

the soft page breaks. If you have spent a lot of time moving page breaks to the correct position you won't need to repeat the exercise the next time you load the file into Edit Plus.

All other codes are saved using this option and the resulting file has a special header that describes the page layout. If you reload an Edit Plus file, these codes are read by the program so the original page layout is used. As an Edit Plus file is actually a text file these codes can be inserted when you write the original text and details of how to do this are described in Appendix II in next month's issue. You can also load an Edit Plus file into Edit to make changes if you wish. This isn't quite as easy as working on an original file but if you wish to make only a few minor changes and have spent time adjusting page breaks, it may be the simplest way.

## Printing

Printing text is probably the single most important function that Edit Plus can perform. Edit Plus does not deal with RISC OS printer drivers or anti aliased fonts. All text is sent directly to your printer using its 'native' text printing facilities which is the fastest and most economical method. As the available fonts and styles vary widely from printer to printer you will need to decide which facilities you want to use and create the appropriate menus, as described in the section on the Config file. The menu items included with the program should be regarded as the bare minimum and are only intended for demonstration purposes.

### Background Printing

Once a file has been loaded into Edit Plus it can be printed as a background task with no further disk access. Unlike the RISC OS printer drivers, there is no need for Scrap files, so if you are working from a floppy disk, you can remove it from the drive once the file has been loaded.

Once printing has begun, you can get on with any other work on the Desktop. The Status window will keep you informed of progress. You can leave this open if you wish or just click Select on the Edit Plus icon to open it from time to time and close it again.

While printing is in progress, you can open the Preview window but the preview Menu will be available. This is because most of the functions that are invoked from this menu make changes to the file and cannot be permitted while printing is in progress.

### Pausing between Pages

If you are printing on individual sheets of paper and your printer does not have a sheet feeder you, will need printing to stop at the end of each page while you insert a new sheet of paper. By setting the Page Pause function in the Layout window, Edit Plus will stop when it reaches the bottom of each page. A window will then open and you can click on Continue when you are ready.

There is no need to do this immediately if you are doing other things at the time. Edit Plus will continue to multi-task while waiting. If you close this window you canreopen it by clicking Select on the Edit Plus icon.

### After printing

After a file has been printed it is still retained in memory in case you wish to save it as an Edit Plus file or print another copy. If you do not wish to do so, you should select 'Clear' from the Main Menu to release this RAM.

## More next month

This concludes the basic instructions for using Edit Plus. Next month we will print the remainder that covers that configuration file and appendixes.

## if you have a problem

There are sometimes minor problems that crop up on the cover disk that prevent readers from using some of the software. Often, these problems are simple to solve. To save you the time and trouble of writing in, here are a few of the most common questions and the solutions to them.

### System resources cannot be found

The filing system has not 'seen' the System folder. This contains the shared resources which RISC OS requires in order to run many applications. It can be found on Applications Disk One as supplied with your computer. If you have not made a back-up of the System folder, copy it to another disk now for safe keeping. If you are using a hard disk, you will probably already have System in the root ($) directory of this. If the error occurs in this instance, display a filer window for the hard disk and try again.

### System or Path cannot be found

See above explanation.

### You need Clib 3.75 or later

Clib is the shared C library for RISC OS. It is stored in the System.Modules directory. If you experience this error, you will need to obtain a copy of Clib 3.75. Many commercial software packages will have it. If you are running RISC OS3 or later, you will already have a copy of Clib 3.75. It can also to be found in the System directory update on the June 1993 cover disk.

To find out which module versions are in memory, press F12 and type Help Modules at the * prompt.

### Cannot find scrap directory

The scrap directory is a temporary directory which RISC OS uses to store temporary files. This is set up in the System folder by the Wimp$Scrap command. The error will occur if the System folder has not been 'seen' or the Wimp$Scrap command is not present.

### Decompacting software

Some programs will not function correctly from the cover disk under certain configurations. If you find that a program fails to work, try decompacting it to another disk. To do this, make use of the Open Viewer options in the Waiter menus. These open standard Filer Windows that display the applications and associated files in an uncompressed state. Simply open a new window for a blank disk, hard disk or RAM disk and drag the files you wish to copy to the new window. The copy process will take place and you should reset the computer before attempting to run the copied files. (Note: If you copy to the RAM disk, you will need to make a physical copy to another disk before resetting the computer as you will loose the data.)

### Disk Errors

Archimedes World offers a full disk replacement service for cover disks that are found to be faulty. If you suspect that a disk has errors, insert it in the drive and perform a Verify function on it by selecting the Verify option from the icon bar menu of the floppy icon. If the verify function reports errors, the disk should be returned to the address below for replacement. Also, if the disk is physically damaged, we will be happy to replace it.

**Please do not return disks that report other errors, as a direct replacement is not likely solve the problem.**

**Cover Disk Returns,**
Archimedes World,
Argus House, Boundary Way,
Hemel Hempstead, Hertfordshire,
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## GAMES

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## New The Home Office Pack

This is available with the A4000 or A5000 and consists of Easiwriter, Datapower, Pipedream 4, PC Emulator, DR DOS 6 and an Audio Training Tape. It also contains demonstration versions of Prophet and Almanac.

## GRAPHICS/DRAW/PAINTING

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## LANGUAGES/COMPILERS

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| 5576b | ARCticulate | 4th Dimens | 19.00 |
| 1091b | Armadeus | Clares | 58.00 |
| 5522b | Digital Symphony | Oregan | 39.00 |
| 1971b | MicroStudio | EMR | 66.00 |
| 0835b | Notate | Longman | 42.00 |
| 5461c | Oak-Recorder II | Oak | 39.95 |
| 5486c | Rhapsody 3 | Clares | 77.00 |
| 1939b | Rhythm-Bed | Clares | 38.00 |
| 5523b | Serenade | Clares | 105.00 |
| 5457b | Sound Tracker | Leading Ed | 36.00 |
| 5519b | Speech! Arch | Superior | 16.00 |
| 5459b | Voice Generator | MJD | 30.00 |
| 5513b | Vox Box | Clares | 45.00 |
| 5441e | ZY-FI Stereo Speaker Sys | Zydec | 34.74 |

## PRINTER DRIVERS

| | | | |
|---|---|---|---|
| 5527a | Expression-PS | CC | 15.00 |
| 0095b | HP Deskjet Colour Driver | RISC Dev | 15.00 |
| 0090b | Star/Epson Colour Driver | RISC Dev | 15.00 |
| 1940b | SuperDump | Silicon V | 19.00 |
| 5503d | Turbo Driver - Colour | CC | 95.00 |
| 5505c | Turbo Driver - BJ Series | CC | 42.00 |
| 5508b | Turbo Driver -HP Deskjet | CC | 42.00 |
| 5511b | Turbo Driver-Epson Styls | CC | 42.00 |

## SPREADSHEETS

| | | | |
|---|---|---|---|
| 0900c | Advance | Acorn | 88.00 |
| 0929c | Eureka v2 | Longman | 81.00 |
| 0901c | Pipedream 3 | Colton | 71.00 |
| 0990c | Pipedream 4 | Colton | 118.00 |
| 5455b | ProSHEET | Silicon V | 39.00 |
| 1903d | Resultz | Colton | 119.00 |
| 5487c | Schema 2 | Clares | 105.00 |

## UTILITIES

| | | | |
|---|---|---|---|
| 5446c | Almanac | Stallion | 57.00 |
| 0957b | Ancestry | Minerva | 58.00 |
| 1946b | ARC-DFS | Dabs P | 21.00 |
| 5913b | Chatter | 4Mation | 33.00 |
| 1106b | Compression | CC | 34.00 |
| 5456b | Disc Rescue | Look | 28.00 |
| 5109c | Disc Sharer | Soft Soln | 137.00 |
| 0094b | Hard Disc Companion II | RISC Dev | 45.00 |
| 5445b | Invstgator II RISCOS 2 | Leading Ed | 21.00 |
| 5497b | Morpheus | Oregan | 28.00 |
| 1914c | Office Tools | Silicon V | 227.17 |
| 0895c | PC Emulator V1.8 | Acorn | 92.00 |
| 0097b | PlayBack | RISC Dev | 19.00 |
| 1943c | Primemover | Minerva | 75.00 |
| 1923b | ProCopier | CIS | 5.00 |
| 5939b | Snippet | 4Mation | 32.00 |
| PWPTb | Wimp Programmers Toolkit | RISC Dev | 16.98 |

## WORD PROCESSORS & EDITORS

| | | | |
|---|---|---|---|
| 0899c | 1st Word + Version 2 | Acorn | 73.95 |
| 5917b | DBEdit | 4mation | 28.00 |
| PDE2b | DeskEdit 2 | RISC Dev | 27.19 |
| 5427b | DeskTop Office II | Minerva | 74.00 |
| 1170b | Easiword II | Minerva | 44.00 |
| 5551b | Easiwriter Dict. French | Icon | 26.00 |
| 5552b | Easiwriter Dict. German | Icon | 30.00 |
| 5553b | Easiwriter Dict. Spanish | Icon | 30.00 |
| 5507c | EasiWriter III | Icon | 132.00 |
| 1112c | Impression Style | CC | 97.00 |
| 1947b | Pendown Plus | Longman | 67.00 |
| 1959b | Pendown v2 | Longman | 45.00 |
| PGLTb | PolyGlot | RISC Dev | 16.98 |
| 5495b | Primeword | Minerva | 53.00 |
| 1933c | Startwrite | Icon | 55.00 |
| 5453b | StrongEd | Stallion | 22.00 |
| 1934c | Talking Pendown | Longman | 57.00 |
| 1918c | Tech Writer | Icon | 158.00 |
| 0940b | WordWise Plus Arch Disc | CC | 29.00 |
| 1902c | Wordz | Colton | 86.00 |

*All prices are shown ex VAT.*
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## HARD DISC DRIVES

| | | | |
|---|---|---|---|
| 5283g | A3000 External IDE 162Mb | RISC Dev | 369.00 |
| 5285g | A3000 External IDE 260Mb | RISC Dev | 489.00 |
| 5286g | A3000 External IDE 450Mb | RISC Dev | 689.00 |
| 5270g | A3000 Internal IDE 20Mb | RISC Dev | 199.00 |
| 5272g | A3000 Internal IDE 80Mb | RISC Dev | 299.00 |
| 5273g | A3000 Internal IDE 120Mb | RISC Dev | 389.00 |
| 5275g | A3000 Internal IDE 210Mb | RISC Dev | 539.00 |
| 5240g | A3010 Internal IDE 20Mb | RISC Dev | 179.00 |
| 5242g | A3010 Internal IDE 80Mb | RISC Dev | 289.00 |
| 5243g | A3010 Internal IDE 120Mb | RISC Dev | 379.00 |
| 5245g | A3010 Internal IDE 210Mb | RISC Dev | 529.00 |
| 5230g | A3020 Internal IDE 20Mb | RISC Dev | 125.00 |
| 5232g | A3020 Internal IDE 80Mb | RISC Dev | 229.00 |
| 5233g | A3020 Internal IDE 120Mb | RISC Dev | 299.00 |
| 5235g | A3020 Internal IDE 210Mb | RISC Dev | 479.00 |
| 5851g | A4 60Mb HD Upgrade | Acorn | 350.00 |
| 5296g | A5000 162Mb 2nd Drive | RISC Dev | 219.00 |
| 5294g | A5000 260Mb 2nd Drive | RISC Dev | 319.00 |
| 5298g | A5000 450Mb 2nd Drive | RISC Dev | 519.00 |
| 5263g | Arch External IDE 162Mb | RISC Dev | 359.00 |
| 5265g | Arch External IDE 260Mb | RISC Dev | 479.00 |
| 5266g | Arch External IDE 450Mb | RISC Dev | 679.00 |
| 5290g | Arch IDE 20Mb Hard Card | RISC Dev | 199.00 |
| 5292g | Arch IDE 80Mb Hard Card | RISC Dev | 299.00 |
| 5293g | Arch IDE 120Mb Hard Card | RISC Dev | 379.00 |
| 5295g | Arch IDE 210Mb Hard Card | RISC Dev | 529.00 |
| 5253g | Arch Internal IDE 162Mb | RISC Dev | 259.00 |
| 5255g | Arch Internal IDE 260Mb | RISC Dev | 379.00 |
| 5256g | Arch Internal IDE 450Mb | RISC Dev | 579.00 |

## LEADS/CABLES

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|---|---|---|---|
| 0772c | 4 Way Surge Strip | Bowthorpe | 18.90 |
| 0569b | Printer Lead 1.8m Arch | BEEBUG | 5.91 |
| 0425b | Printer Lead 2m Arch | BEEBUG | 7.62 |
| 0424b | Printer Lead 3m Arch | BEEBUG | 8.47 |
| 0578c | Printer Lead 5m Arch | BEEBUG | 16.98 |

## MODEMS/COMMS SOFT/HARDWARE

| | | | |
|---|---|---|---|
| 5913b | Chatter | 4Mation | 33.00 |
| 0093c | Hearsay II | RISC Dev | 75.00 |
| 0776e | Linnet 2400 Modem | Pace | 255.28 |
| 3111g | SM2400 + Hearsay II+Lead | BEEBUG | 139.00 |

## MONITORS & ACCESSORIES

| | | | |
|---|---|---|---|
| 0190g | Acorn AKF18 Multiscan | Acorn | 254.47 |
| 0182g | Acorn AKF30 Monitor | Acorn | 211.91 |
| 0180g | Acorn AKF40 Monitor | Acorn | 211.91 |
| 0532g | Cub 2038 20in Monitor | Microvitec | 999.00 |
| 0525g | Cub-Scan 1440 Monitor | Microvitec | 399.00 |
| 0546e | Monitor Filter | Memorex | 78.60 |
| 0503g | Phillips Green Monitor | Phillips | 87.00 |
| 0501g | Ranger 5017 Monitor | Aydin | 853.00 |
| 0502g | Ranger 5021 Monitor | Aydin | 1380.00 |
| 0545d | Screen Filter 14 C.Fibr | BEEBUG | 24.64 |

## NETWORKS

| | | | |
|---|---|---|---|
| 5076b | !APPFS | Angelsoft | 130.00 |
| 4601e | A3000/3010 Ethernet Card | RISC Dev | 139.00 |
| 5025b | A3020/4000 Econet Module | Acorn | 49.00 |
| 4602e | A3020/4000 Ethernet Card | RISC Dev | 139.00 |
| 5853c | A4 Econet Upgrade | Acorn | 50.00 |
| 4600e | Arch/A5000 Ethernet Card | RISC Dev | 139.00 |
| 5005c | AUN Level IV Fileserver | Acorn | 394.00 |
| 5006c | AUN Level IV SL Upgrade | Acorn | 199.00 |
| 5003b | AUN Level IV Upgrade | Acorn | 30.00 |
| 5075b | Classprint LD | Oak | 75.00 |
| 5017b | Econet Upgrade M128/Arch | Acorn | 47.95 |
| 5037e | Ethernet A3020/A4000 Int | Acorn | 149.00 |
| 5038e | Ethernet Card for A4 | Atomwide | 199.00 |
| 5008c | TCP/IP Programmers Pack | Acorn | 50.00* |
| 5009c | TCP/IP Protocol Suite | Acorn | 199.00 |

## POCKETBOOK ACCESS/SOFTWARE

| | | | |
|---|---|---|---|
| 0581b | A-Link | Acorn | 42.51 |
| 0584b | Flash Disc 256K | Acorn | 59.53 |
| 0588c | Flash Disc 512K | Acorn | 85.06 |
| 0587b | Mains Lead -Pocket Book | Acorn | 12.72 |
| 0586b | OPL Editor | Acorn | 59.53 |
| 0390e | Pocket Book Computer | Acorn | 212.72 |
| 0591b | Pocket Book Desk Stand | Widget | 13.61 |
| 0589b | Pocket Book Finance Pack | Widget | 59.53 |
| 0590b | Pocket Book Games Pack | Widget | 42.51 |
| 0392g | Psion 3 256k | Psion | 195.00 |
| 0583b | RAM Disc 128K -Pocket Bk | Acorn | 51.02 |
| 0596b | Schedule - Pocket Book | Acorn | 16.98 |
| 0597g | Schedule Class Pack | Acorn | 170.17 |

## PRINTER ACCESSORIES & PAPER

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|---|---|---|---|
| 0428c | Crossover switch 2x2 | BEEBUG | 34.00 |
| 0407c | Labels 1000 x 3.5 | Label-Trac | 6.17 |
| 0454c | Labels 2000 3.5 | Label-Trac | 10.50 |
| 0515c | Laser Printer Labels | Avery | 9.96 |
| 0422c | Laser Printer Paper | BEEBUG | 6.34 |
| 0497e | LaserDirect HiRes Card | CC | 324.00 |
| 5644d | Paper 15.3x11 60gsm 1pt | BEEBUG | 17.00 |
| 5645d | Paper 15.3x11 70gsm 1pt | BEEBUG | 20.00 |
| 0453d | Paper 2pt 9.5x11 60gsm | BEEBUG | 23.00 |
| 5640d | Paper 9.5x11 1pt 60gsm | BEEBUG | 12.00 |
| 5641d | Paper 9.5x11 1pt 70gsm | BEEBUG | 13.00 |
| 5642d | Paper 9.5x11 1pt 85gsm | BEEBUG | 11.00 |
| 0455d | Paper A4 70gsm 1-part | BEEBUG | 14.40 |
| 5643d | Paper A4 90gsm 1-part | BEEBUG | 12.60 |
| 0405d | Paper A4 Handipack | BEEBUG | 11.26 |
| 0421c | Photocopy Paper | BEEBUG | 3.36 |
| 0538c | Print Sharer 2 to 1 Auto | BEEBUG | 32.34 |
| 0539c | Print Sharer 4 to 1 Auto | BEEBUG | 42.55 |
| 0427c | Printer Sharer 2 to 1 | BEEBUG | 16.98 |
| 0567c | Printer Sharer 4 to 1 | BEEBUG | 28.57 |

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| | | | |
|---|---|---|---|
| 0333g | Acorn Inkjet Printer | Acorn | 229.00 |
| 0364g | Canon BJ10sx - Black | Canon | 179.00 |
| 0365g | Canon BJ10sx - White | Canon | 179.00 |
| 0451g | Canon BJ20 - Cream | Canon | 265.00 |
| 0347g | Canon BJ200 Printer | Canon | 280.00 |
| 0346g | Canon BJ230 Printer | Canon | 315.00 |
| 7510g | Canon BJ300 Printer | Canon | 329.00 |
| 7511g | Canon BJ330 Printer | Canon | 415.00 |
| 7525g | Canon BJC800 Printer | Canon | 1370.00 |
| 0380g | Epson FX1050 Printer | Epson | 403.75 |
| 0328g | Epson FX850 Printer | Epson | 323.75 |
| 0388g | Epson LQ100 Printer | Epson | 176.40 |
| 0326g | Epson LQ1060 Colour | Epson | 723.75 |
| 0375g | Epson LQ1070 Printer | Epson | 368.40 |
| 0376g | Epson LQ1170 Printer | Epson | 517.20 |
| 0379g | Epson LQ200 Printer | Epson | 182.00 |
| 0329g | Epson LQ450 Printer | Epson | 238.26 |
| 0374g | Epson LQ570 Printer | Epson | 240.00 |
| 0327g | Epson LQ860 Colour | Epson | 543.75 |
| 0382g | Epson LQ870 Printer | Epson | 424.80 |
| 0377g | Epson LX100 Printer | Epson | 155.00 |
| 0386g | Epson LX1050 Printer | Epson | 329.00 |
| 0378g | Epson LX400 Printer | Epson | 136.13 |
| 0322g | Epson LX850 Printer | Epson | 172.50 |
| 0381g | Epson Stylus 800 Printer | Epson | 239.00 |
| 0461g | HP Deskjet Portable | HP | 295.00 |
| 0490g | HP500C Colour Deskjet | HP | 269.00 |
| 0452g | HP510 Deskjet Printer | HP | 235.00 |
| 0494g | HP550C Colour Deskjet | HP | 449.00 |
| 0496g | LaserDirect HiRes4 | CC | 845.00 |
| 7500g | LaserDirect HiRes8 | CC | 1275.00 |
| 7570g | Star Laser LS-5 | Star | 525.00 |
| 7575g | Star Laser LS-5EX | Star | 649.00 |
| 7580g | Star Laser LS-5TT | Star | 845.00 |
| 0441g | Star LC-100 Colour | Star | 149.00 |
| 0343g | Star LC-15 Printer | Star | 193.00 |
| 0471g | Star LC-20 Printer | Star | 113.00 |
| 0436g | Star LC-200 Colour | Star | 160.00 |
| 0444g | Star LC24-100 Printer | Star | 162.00 |
| 0338g | Star LC24-15 Printer | Star | 249.00 |
| 0367g | Star LC24-20 II Printer | Star | 189.00 |
| 0337g | Star LC24-20 Printer | Star | 176.00 |
| 0402g | Star LC24-200 Colour | Star | 220.00 |
| 0300g | Star SJ144 Colour Printe | Star | 475.00 |
| 0442g | Star SJ48 Inkjet Printer | Star | 189.00 |
| 0472g | Star XB24-200 Colour | Star | 341.00 |
| 0473g | Star XB24-250 Colour | Star | 407.00 |
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## SCANNERS

| | | | |
|---|---|---|---|
| 1962g | ScanLight 256 - Arch | CC | 185.00 |
| 1960g | ScanLight 256 A3000/4000 | CC | 185.00 |
| 5506g | ScanLight II A4 A3000 | CC | 277.00 |
| 1963g | ScanLight II A4 Arch | CC | 277.00 |
| 1970g | Scanlight Pro+SCSI A5000 | CC | 699.00 |
| 1964g | ScanLight Pro. Only | CC | 550.00 |
| 1958g | ScanLight Video - A5000 | CC | 215.00 |
| 0117g | Spectra (A3000 External) | RISC Dev | 559.00 |
| 0119g | Spectra (A3000 Internal) | RISC Dev | 549.00 |
| 0118g | Spectra Archimedes/A5000 | RISC Dev | 549.00 |

# SOFTWARE

## SITE LICENCES

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|---|---|---|---|
| 1392c | Advance Primary Licence | Acorn | 181.00 |
| 1391c | Advance Secondary Licenc | Acorn | 440.00 |
| 5379c | Artworks Network Licence | CC | 650.00 |
| 5376d | Artworks Site Licence | CC | 543.00 |
| 5396c | Impression II Site Licnc | CC | 542.00 |
| 5394c | Impression Network Licnc | CC | 645.00 |
| 5315c | Ovation S.L. Pack | RISC Dev | 10.00 |
| 5312c | Ovation Site Licence | RISC Dev | 475.00 |
| 5372c | Pinpoint Site Licence | Longman | 386.00 |
| 5384c | Pipedream 4 Site Licence | Colton | 696.00 |
| 5368g | S-Base Network Licence | Longman | 272.00 |
| 5369c | S-Base Site Licence | Longman | 400.00 |
| 5382c | Squirrel Licence | Digital | 516.00 |

## ACCOUNTING

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|---|---|---|---|
| 5458c | Business Accounts | Minerva | 275.00 |
| 1915c | Financial Accountant | Silicon V | 227.17 |
| 0947b | Home Accounts | Minerva | 33.00 |
| 0926c | Nominal Ledger | Minerva | 79.95 |
| 5470c | Payroll Manager | Silicon Vi | 66.00 |
| 0922c | Personal Accounts | Apricote | 29.00 |
| 0920c | Prophet | Apricote | 131.00 |
| 0923b | Prophet Entry Level | Apricote | 8.00 |
| 0925c | Purchase Ledger | Minerva | 25.00 |
| 1917c | Share Holder | Silicon V | 102.13 |

## COMPUTER AIDED DESIGN

| | | | |
|---|---|---|---|
| 1909c | Arc PCB Professional | Silicon V | 234.00 |
| 0913c | Arc-PCB | Silicon V | 99.00 |
| 1931c | CADet | Minerva | 133.00 |
| 1932b | KiddiCAD | Oak | 58.00 |
| 0959c | Oak P.D.T. | Oak | 189.00 |
| 0958c | Oak PCB | Oak | 93.00 |
| 1945g | ProCAD | Minerva | 393.00 |
| 1910c | SolidCad | Silicon V | 78.00 |
| 1911c | SolidTools | Silicon V | 225.53 |
| 1936b | WorraCAD | Oak | 93.00 |

## DESKTOP PUBLISHING

| | | | |
|---|---|---|---|
| 1113c | Impression II DTP | CC | 115.00 |
| 1115c | Impression Junior | CC | 63.00 |
| 1112c | Impression Style | CC | 97.00 |
| 0114 | Ovation Demo Disc | RISC Dev | 4.25 |
| 0108c | Ovation DTP | RISC Dev | 99.00 |
| 1111c | Impression Publisher | CC | TBA |

## DTP TOOLS/UTILITIES

| | | | |
|---|---|---|---|
| 0096b | Desktop Thesaurus | RISC Dev | 19.00 |
| 5440b | Equasor | CC | 36.00 |
| 1976a | Font FX | Datastore | 9.00 |
| 1921b | Font Pack Newhall | Acorn | 34.00 |
| 1922b | Font Selwyn/Sydney | Acorn | 34.00 |
| 1920b | Font Starter Pack | Acorn | 34.00 |
| 5783b | Glimpse | Sherston | 8.00 |
| 1269b | Good Impression Manual | Word Proc | 26.95* |
| 5731b | Image Outliner | Iota | 72.00 |
| 5464b | Impression Business Supp | CC | 38.00 |
| PFNTa | RISC User Fonts Disc | RISC Dev | 12.68 |
| 5526c | ShowPage | CC | 139.00 |
| 0099b | Sleuth OCR | RISC Dev | 49.00 |
| 5510b | Tracer | Midnight G | 46.00 |
| 0092b | TypeStudio | RISC Dev | 45.00 |

## DATABASES

| | | | |
|---|---|---|---|
| 5450b | Archivist Pro | Oregan | 38.00 |
| 5744c | Datapower | Iota | 129.00 |
| 1913c | DataVision | Silicon V | 77.00 |
| 5760b | Desktop Database | Iota | 52.00 |
| 1992c | Flexifile | Minerva | 73.00 |
| 5720b | Junior Database | Iota | 52.00 |
| 0917c | Knowledge Organiser II | Clares | 75.00 |
| 0098b | Masterfile 3 | RISC Dev | 49.00 |
| 0989c | Multistore II | Minerva | 123.00 |
| 1007c | Pinpoint | Longman | 69.00 |
| 1011b | Pinpoint Junior | Longman | 22.00 |
| 5496c | Record 3 | Colton | TBA |
| 0931g | S-Base Developer | Longman | 146.00 |
| 0932g | S-Base Developer + | Longman | 268.00 |
| 0933c | S-Base Personal | Longman | 75.00 |
| 5447c | Squirrel | Digital | 120.00 |
| 0921c | System Del Plus V2 | Minerva | 39.99 |
| 5717b | Viewpoints Database | Sherston | 35.00 |

## EDUCATIONAL SOFTWARE

| | | | |
|---|---|---|---|
| 5716b | 10/10 Early Essentials | 10outof10 | 19.00 |
| 5709b | 10/10 English | 10outof10 | 19.00 |
| 5718b | 10/10 Maths (Algebra) | 10outof10 | 19.00 |
| 5708b | 10/10 Maths (Numbers) | 10outof10 | 19.00 |
| 1343b | 1st Paint | Resource | 34.00 |
| 5927b | Adventure Playground | Storm | 17.00 |
| 5920b | All About Me | Northern M | 14.00 |
| 5700b | Animated Alphabet | Sherston | 19.00 |
| 5781b | ArcVenture 1- The Romans | Sherston | 30.00 |
| 5713b | ArcVenture II- Egyptians | Sherston | 29.95 |
| 5788b | ArcVenture III- Vikings | Sherston | 30.00 |
| 5789b | Badger Trails | Sherston | 36.50 |
| 5933b | Balloons & The Zoo | Topologika | 27.00 |

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| 0772c | 4 Way Surge Strip | Bowthorpe | 18.90 |
| 5852c | A4 Battery Pack | Acorn | 50.00 |
| 5854b | A4 Shoulder Bag | Acorn | 35.00 |
| 0723c | Delta Cat Joystick | Voltmace | 24.74 |
| 5493b | Joymaster | Leading Ed | 24.00 |
| 0726b | Joystick Controller | Leading Ed | 34.00 |
| 0789a | Mouse Mat - Blue | BEEBUG | 3.36 |
| 0788a | Mouse Mat - Red | BEEBUG | 3.36 |
| 0714b | Mouse Splitter | Voltmace | 16.48 |
| 0440c | Printer Stand Adjustable | BEEBUG | 8.47 |
| 4084c | SuperCharger Joystick | Quickjoy | 9.50 |
| 0762c | Trackerball - Archimedes | GEC | 39.00 |

## BOOKS/MANUALS

| | | | |
|---|---|---|---|
| 5478b | !Help | Sherston | 7.95* |
| 5479b | !Help - Draw | Sherston | 15.95* |
| 5481b | !Help 3 | Sherston | 9.95* |
| 1207c | 30 Hour BASIC | BBC/NEC | 15.95* |
| 1265c | A3010/3020 Tech Ref Man. | Acorn | 29.95* |
| 5856b | A4 Portable Handbook | Acorn | 7.50* |
| 5857c | A4 Technical Ref Manual | Acorn | 65.00* |
| 5855b | A4 Welcome Guide | Acorn | 10.00* |
| 1252c | A5000 Tech Ref Manual | Acorn | 65.00* |
| 1238c | Acorn Educ Directory | Acorn | 4.95* |
| 1203b | ANSI C Ref 4 User Guide | Acorn | 25.00* |
| 0915a | Arch Ass Lang Prog Disc | Dabs P | 7.21 |
| 1211b | Arch Assembly Language | Dabs P | 14.95* |
| 1262b | Arch Game Makers Manual | Sigma | 14.95* |
| 1243b | Arch Oper. Syst (Book) | Dabs P | 14.95* |
| 1246b | Archimedes First Steps | Dabs P | 9.95* |
| 1228b | Assembler 2 User Guide | Acorn | 25.00* |
| 1208b | Basic V: Dabs Guide | Dabs P | 9.95* |
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# The word on the streets

*Integrating a thesaurus and dictionary into Impression is just one of the updates in the latest version. But WordWorks is also a product in its own right as we exclusively discover. Word Works*

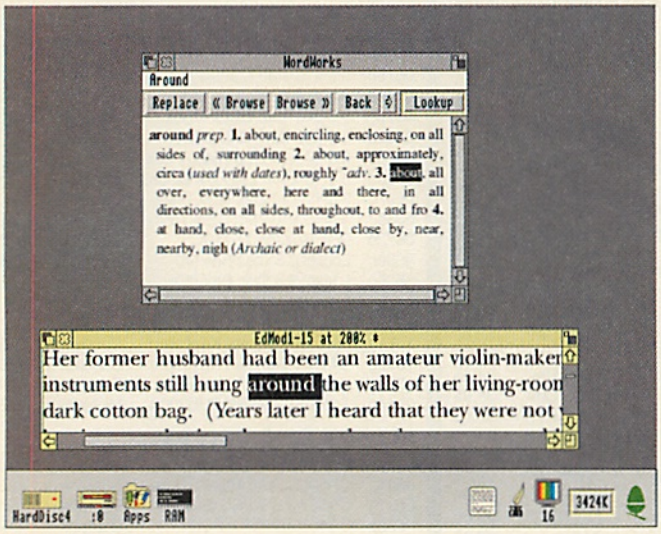
**Forget the meaning of life, Computer Concepts has put the meaning in words.**

Anyone who puts either pen to paper or finger to keyboard will at some time refer to a dictionary and, most likely, a thesaurus as well. The more you write, the more referencing you will need to do and nothing stops the flow of words faster than pausing to look-up the correct meaning of a word or phrase, or a new way of saying the same thing. Enter Word Works.

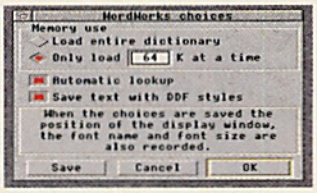
Designed specifically for use with the Impression range of software packages, Word Works places the Collins GEM Dictionary and Thesaurus, not at your fingertips but at the disposal of your far faster computer. It's also mind numbingly simple to use, highlight the word or phrase in your Impression document and within a couple of seconds (or instantly if you install the Thesaurus and Dictionary into memory, which takes-up around 700k) the Collins GEM Dictionary and Thesaurus definitions are displayed in the Word Works window. You can also stick to the more traditional method of looking-up a word by using the browse function to scroll through an alphabetical list of words and phrases. Click on any of the words and phrases to bring up the dictionary and thesaurus definitions.

This is useful enough in itself but the really clever stuff starts when you want to explore the meaning of the word or phrase selected and its derivatives. You can do this by highlighting a word or phrase in the Word Works window and Word Works will then look-up and display the definitions of the newly selected text. It's all too easy to lose track of where you started, but once again Word Works comes to the rescue. A history function keeps a record of words looked-up so far, so you can easily go back to a previously selected word. If, in your rambling through the literary labyrinth, you find a suitable replacement for the currently selected word or phrase, click on the text in the Word Works window and the Impression document is automatically amended.

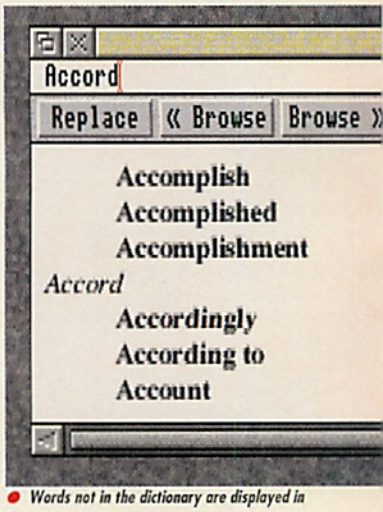
The inclusion of phrases adds a new dimension to word processing. I'm not talking about one or two words here but fully fledged sayings,



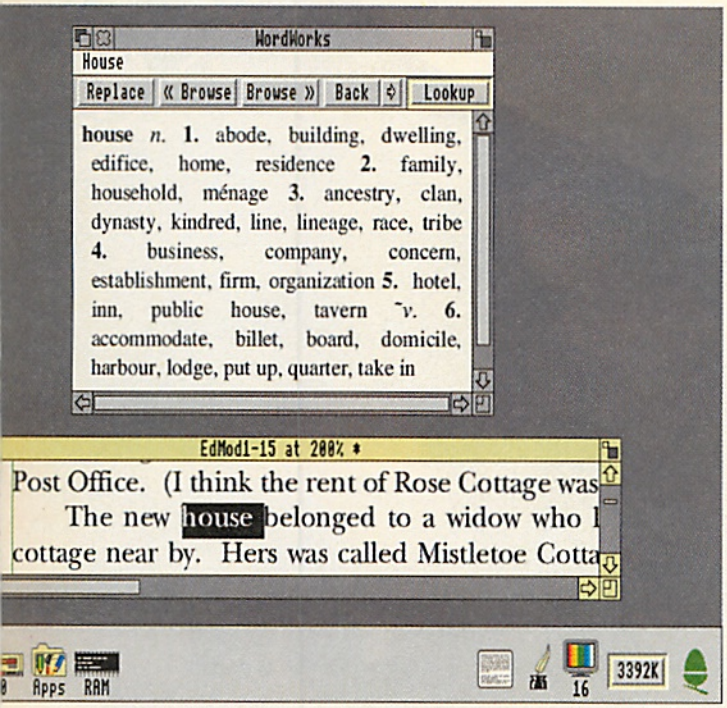

Using the thesaurus




Setting the WordWorks choices

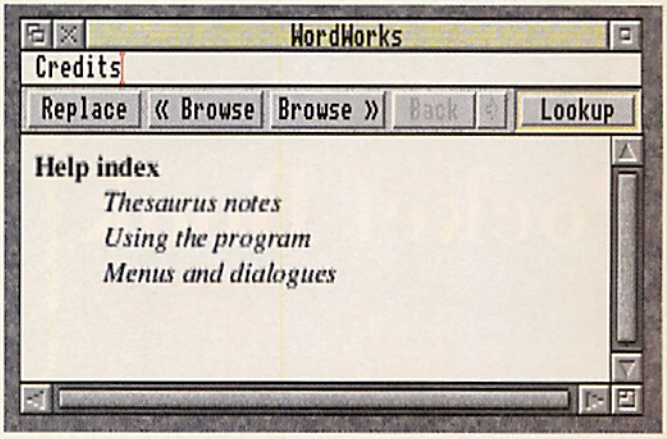



Words not in the dictionary are displayed in



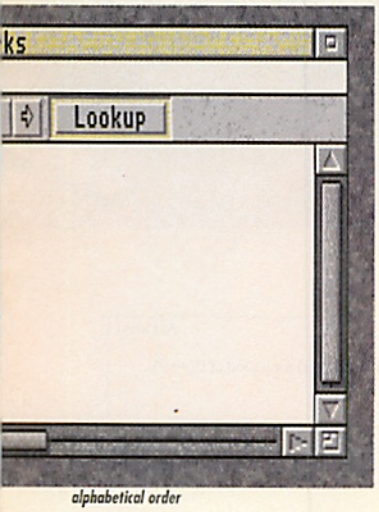

● *Make your text read better with Word Works*

● *The Interactive Help system*



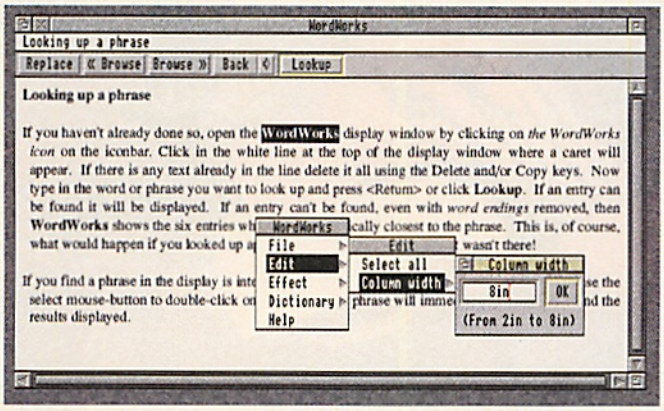

often obscure, that with the stroke of the mouse reveal their sometimes surprising true meaning. This is all handled in the same way that Word Works handles the definitions of words, including all the text replacement options and alternative phrases.

If used in conjunction with a software package other than Impression, things get a little more complicated but not impossibly so. Unfortunately, the link between programs no longer exists (although wise software developers should consider it a vital component of any further text




*alphabetical order*

processing packages produced), so you can no longer highlight a word and see it appear, with definitions, automatically in the Word Works window. You now have to type the word or phrase into the Word Works window or save out the text in question and paste it into Word Works.

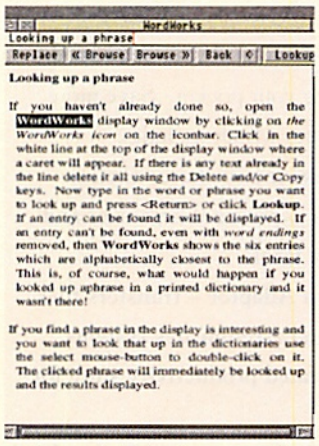



● *Altering the column width*

It's a little more hassle but once entered, all the functions of Word Works are at your command. Again, transferring text from Word Works requires you to save-out the selected text and paste it into your document.

One of the more impressive Word Works functions is its ability to find the root word. Try looking up a word that ends in -ing or -ed and you probably won't find it. That's because words ending in -ing and -ed are variations on a root word. Word Works knows this and when an -ing or -ed word is entered, it looks-up the definition of the root word which will include its variations. Clever stuff indeed.

Word Works displays all its information in a window (what information is displayed depends upon your selected options), which means the window shape can be changed to accommodate your other programs. Word Works will alter the format of the text displayed accordingly but it will always follow the format seen in a dictionary or thesaurus. This includes information on whether the word is a noun or adjective, plural and so on. If the text won't fit in the window you created, then you can select any of the fonts installed on your machine and any font size to fill the window. If you select a root font, the text will be displayed in the




● *Phrases make WordWorks very powerful*

various bold and italic typefaces as appropriate, or you can just display it all in bold or italic, the choice is yours.

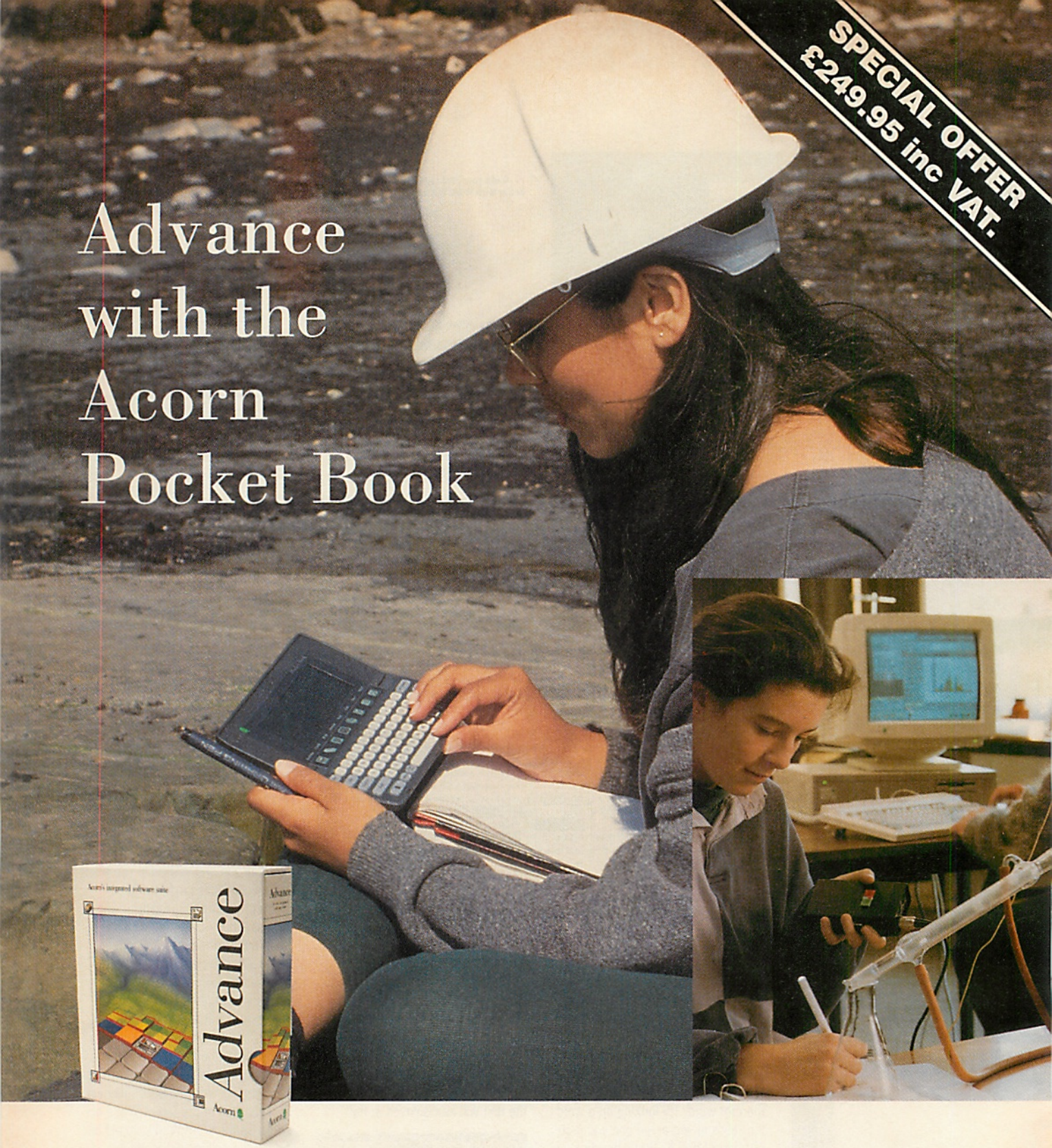
Although very simple to use, Word Works includes a help dictionary. Using the browse function you can scroll through the various topics until you come to an item of interest, click on the item text and more details will appear. Computer Concepts plans to make more use of this function and you could see other help dictionaries produced for Concept products, including Impression.

Word Works is a simple but extremely effective tool that is a must for all serious users who produce a lot of text. Users new to Impression will find a copy of Word Works included in their package, as will people who buy the Impression upgrade, which incidentally costs less than buying Word Works on its own.

Launched at the recent World of Acorn Show, Word Works should be taking the Archimedes world by storm, the most basic of text messages will contain obscure phrases and incredibly long words as people all over the World explore the Collins GEM dictionary and thesaurus with the twitch of a finger and a flick of the wrist. At £39 pounds plus VAT, it's not going to cost the Earth

**FACTFILE**

**Product**: Word Works
**Supplier**: Computer Concepts
Gaddesden Place, Hemel Hempstead, Hertfordshire. HP2 6EX
Telephone 0442 63933
**Price**: £39 excl. (Plus VAT)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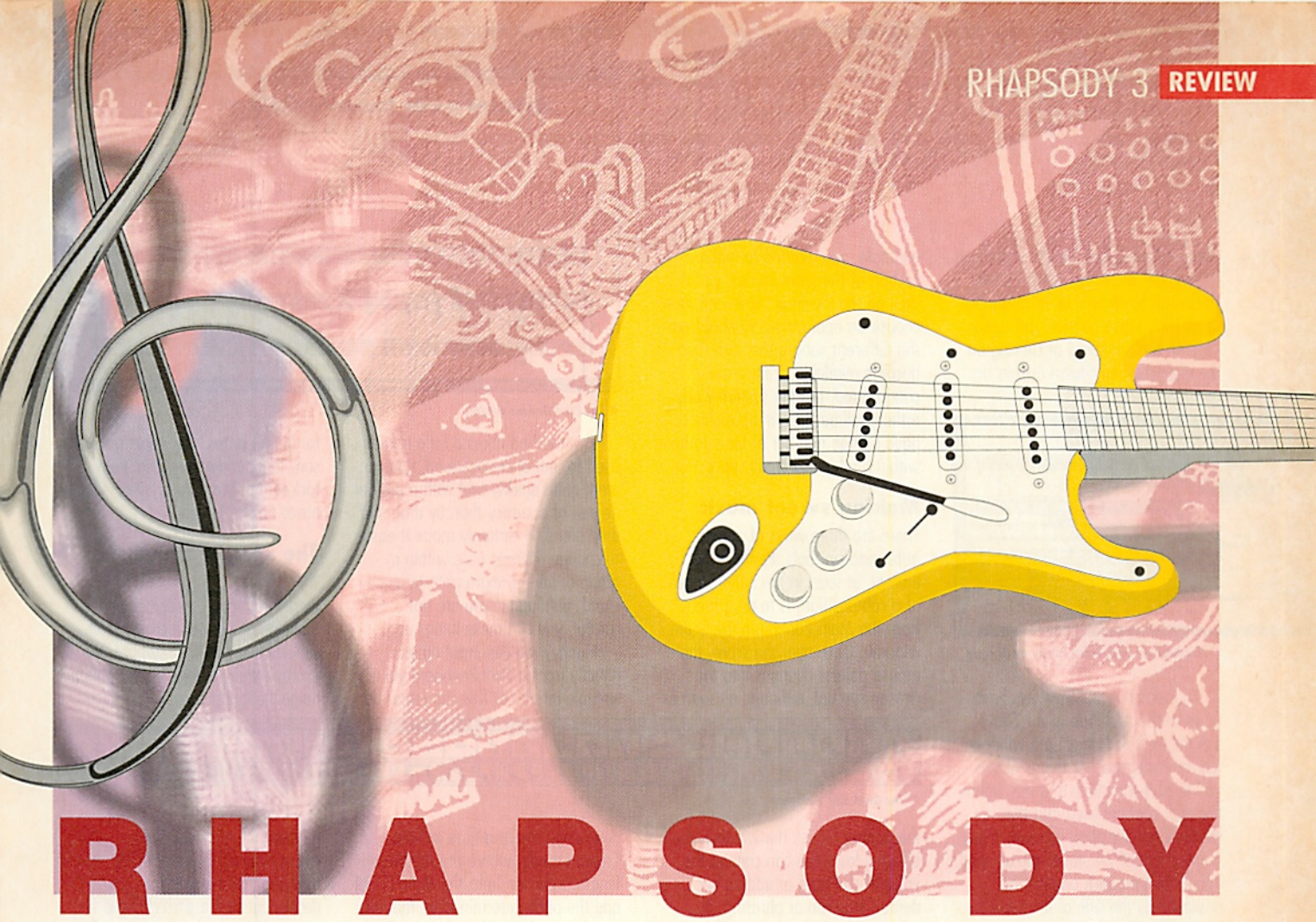


# RHAPSODY

## *Music processing takes another leap forward with the third version of Clares' popular application*

**When the mood takes me, I'll sit down at a piano and spend an hour or so happily tinkling away at the keyboard. In the back of my mind is the hope that out of my melodic ramblings will come a tune that would not only solve all my financial worries, but also fund an early retirement to the Seychelles. Occasionally, I'll come up with something that sounds halfway decent, something worth writing down - but then I remember what it's like to slave away over a piece of manuscript paper and so try to memorise it instead. The trouble is that the next time I sit down and attempt to remember my original ideas, my mind is as empty as a central heating showroom in the Sahara.**

My problem is that when it comes to writing music, I'm very untidy. As I tend to make a lot of mistakes and chop and change things around, a pristine piece of orchestral size manuscript soon ends up looking like a coal miner's hand towel. I've always been like this, which unfortunately didn't endear me to my tutors at college.

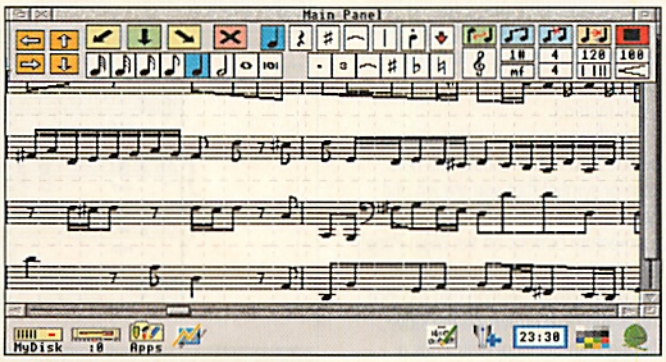
If I'd had something like Rhapsody 3, things could have been different. Rhapsody is best described as a musical word processor in that it allows you to enter notes directly into the computer, change them around, listen to the finished product and then print it out. As its name suggests, the application has now reached version 3. Earlier incarnations were criticised for having an unwieldy user interface as well as lacking various musical features required for more demanding forms of composition. Will number three finally lay these ghosts to rest?

### Face the music

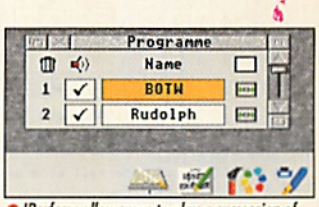
The package comprises three disks and a manual. The main application is on disk one, while the other two contain several directories of example scores as well a number of other utilities which I will come to later.

Before loading the program for the first time you have to go through an initialisation procedure. Once you've done this, you can then make backup copies or install the application on a hard disk. To run Rhapsody you need at least 2Mb of Ram. Actually, you are probably better off with 4Mb - Rhapsody itself uses over 800k, if you load !Printers as well, your average 2Mb machine isn't left with a great deal of room to manoeuvre.

Once loaded, Rhapsody will merrily multi-task with other programs. Clicking on the application icon brings up two windows - the score window and the Main Panel window. Up to five different scores can be held in memory at any one time and data copied between them.




*Midi files, such as the Brandenburg Concerto No. 3 can be imported into the application*

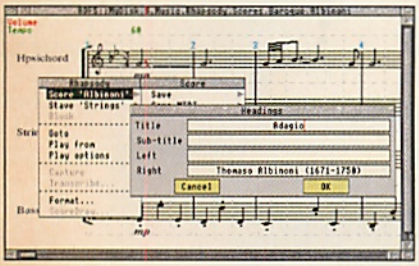



*!Perform allows you to play a succession of scores without Rhapsody having to be loaded*

### Take note

Initially you are presented with a single stave and a default treble clef. There is a cursor of sorts, although it's unlike any of its word processor counterparts in that it consists of a ➤

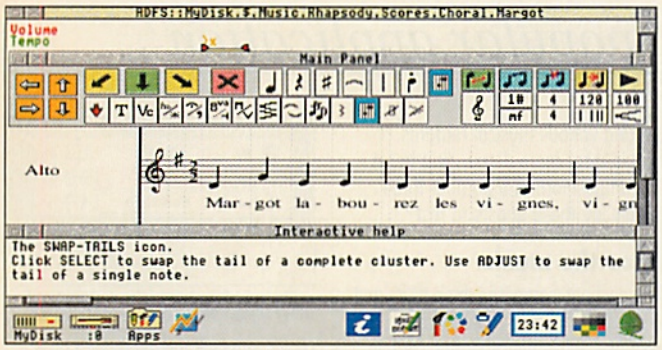
cream coloured box. Inside it are two arrows that mark the current pitch. These can be moved up or down by using the mouse pointer, the cursor keys on the keyboard or clicking on the respective up/down arrows on the Main Panel.



● *Headings can be included on any music score*

To insert a new Stave you have to go to the Add item in the Stave sub menu. This brings up a window which amongst other things allows you to give the stave a name, define the Midi channel used and the required transposition interval, if any. A maximum of 24 staves are allowed; information on each one can be displayed by the side of the score.

The Headings option in the stave sub-menu enables you to add a title and left and right headings.




● *Help in the form of Acorn's interactive help application, can always be on call*

Every note in a bar fits into a slot. The slot width varies according to the length of the note and any accidentals that are present. Rhapsody uses these as guides to ensure that both notes and symbols are correctly spaced.

The Main Panel is the principal means by which Rhapsody is controlled and is divided into Action, Selection and Sub Choice icons. The Action icons look after the movement of the cursor and the insertion and deletion of notes, clefs and effects. The Selection icons are at the top and also at the bottom right hand side of the panel and control functions such as note value, rests, time signatures, dynamics and so on. If you click on any of these icons, a set of relevant sub choice icons appears at the bottom of the window. If, for example, you wanted to make a section of the score louder, you'd click on the Dynamics icon and then choose an appropriate symbol from the different sub-choices that then become available. It may sound complicated, but the system works rather well because it's possible to have a large number of tools to hand within a relatively small space.

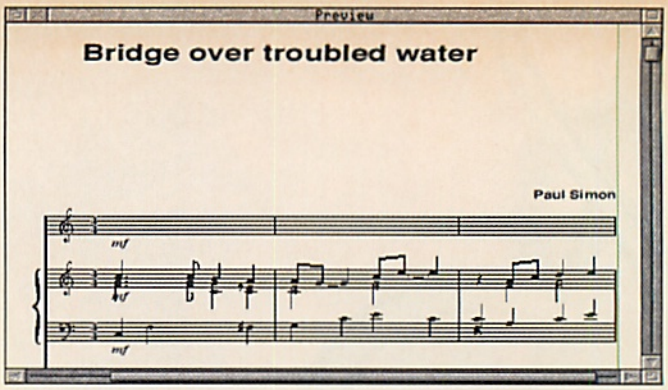
## Making sweet music

There are three ways of entering notes and symbols. Perhaps the easiest, at least in the initial stages of a composition, is to drag them from the Main Panel into the Score window. Once over the score, the mouse pointer changes into the chosen symbol, although as soon as the pointer leaves the window, the effect is lost. You can change the value of the note or add an accidental, staccato or phrasing, by pressing the function keys F1 to F8. The shape of the pointer is modified accordingly.

To insert an object you position it at an appropriate place on the stave and then click Select. In the case of notes, this puts the stems upwards; using Adjust sends them down.

Both notes and symbols can be moved around the stave by holding down Select and dragging them to a new location. If you perform the same operation with Adjust a copy is made instead.

Another way to put information on the screen is to first choose the note value or symbol that you require and then use the Insert-at, Insert-after or Insert-before buttons on the Main Panel. These actions are performed relative to the current cursor position and the location of the pitch arrows on the stave. Clicking with Select or Adjust has a similar effect on the note tails as before.




● *The Print Options window*

This method takes a little getting used to, but once mastered, you can work quite quickly and with a greater degree of accuracy than by drag and drop alone. It certainly made it easier to change a single note within a group or add an extra note to a chord, although if you are not careful, you can mess things up.

Finally, you can input notes directly from a Midi keyboard via a suitable interface. This can either be done one note at a time in Step Capture mode, where the rhythmic length is chosen from the Main Panel and the pitch determined by the note pressed on the keyboard, Semi-Real Time which is similar to Step Time except that the note length is governed by the amount of time a key is held down or in Real - Time where whatever you play is recorded straight into the computer's memory. If you are particularly confident, you can use the Split keyboard facility and record two parts at once.

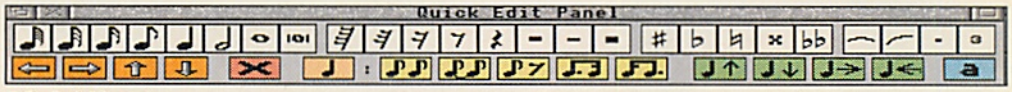
The Transcribe window has a number of quantisation options which help Rhapsody make sense of any tiny rhythmic errors present in the performance. As with other similar packages, rhythmic values can be rounded off to the nearest crotchet, quaver, semiquaver or demi-semiquaver. In addition, the application is capable of recognising triplets as well as ensuring that small gaps between notes are smoothed over. The most interesting feature is variable length quantisation where the quantisation value is increased for longer notes. This helps make sure that semi quavers are not tacked onto the end of every semi-breve on the screen.

## The song remains the same

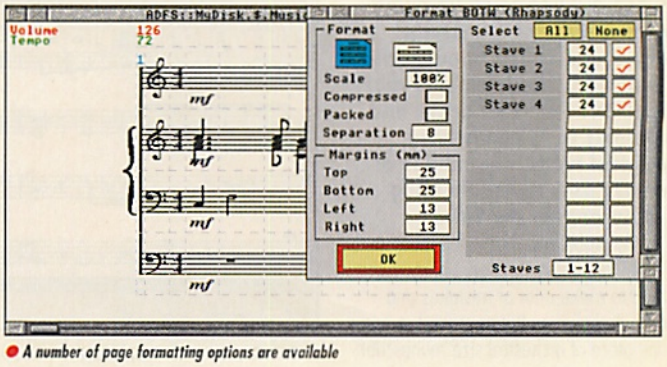
By going through every icon on the Main Panel, you soon come across virtually every musical symbol. For example there's phrasing, ties, the full range of dynamics as well as all manner of bar lines and repeats. You can even use Glissandi - which I hasten to add is not an exotic ice cream desert, but sliding pitch changes between successive notes. Any of the trills can be user defined, which should appeal to those with a bent for early music. I was most impressed.

Other buttons enable you to add Guitar chords, adjust the slot width and include lyrics and performance directions. Any outline font can be used, provided you've set it up first in the Print Options window. If you press Menu over the Main Panel when in text mode, you will be able to access several lists of Italian, German and English musical terms. Those that you select appear at the current cursor position; other instructions or lyrics have to be entered manually.

One problem with this is that only eleven characters can fit into one slot which means that you can't type in a complete line of text and fit it into place. Fitting words of several syllables into a complex melody can be rather fiddly, particularly if you want them to appear to be joined together.




● *The Quick Edit window*




● *A number of page formatting options are available*

If you choose the appropriate option on the Icon Bar menu or click on the top right hand corner of the Main Panel, the Quick Edit Panel will appear. This replaces the Main Panel and enables you to make corrections to individual notes as well as carry out various editing functions. These include splitting a note in two or turning it into a syncopated or dotted rhythm.

You can highlight any part of the score by double clicking and then dragging with Select. Once this has been done, a number of functions become available in the Block menu. Apart from the usual copy, clear and delete facilities, you also have the option of transposing, shifting or retailing the highlighted block. You can also change the note type from the standard blob. This is most useful if you want to create a cue part or reproduce a medieval effect.

Scores can either be played through the Arc's internal speakers or via a Midi Keyboard. As I mentioned earlier, each stave can be assigned to a separate Midi channel. You can also set the program number of keyboard sound that you wish to use.

## Sounds familiar

The way in which sounds are organised varies from one manufacturer to another. Program one may produce two completely different sounds on two almost identical keyboards. The Tones list used by Rhapsody adheres to the General Midi standard. If your keyboard differs from this in any way, it's simple enough to delve inside the application directory and edit it so that it fits your particular requirements.

Depending the sophistication of your keyboard, any pedal effects, tempo changes or nuances of expression included in the score will be reproduced in any subsequent performance. I like this a lot, because it gives you the incentive to make the most of different dynamics.

Standard voice modules can be used and several come with package. On Resource Disk one there's an application called Voices. This allows you to create files which, when run, load a specific set of sound modules.

The Perform program, also on Resource Disk one, will play scores without Rhapsody having to be loaded. A program list can be created so that a succession of pieces can be performed in turn.

Standard Midi data files can also be imported. These are available from several different sources and are an easy way to build up a collection of musical arrangements. Format 1 Midi files are better in that each part can be assigned to a separate stave unlike Format 0, where the notes are crammed onto one. In either case, Quantisation is applied before the data is transcribed onto the score. I found that Rhapsody was able to cope reasonably well with even the most complex Midi files.

Scores can either be saved in compressed or uncompressed format or as type 0 or 1 Midi files for use with other sequencing software. They can be printed using standard RISC OS Printer Drivers. There are a number of different formatting options as well as a print preview facility. The Print Options window allows you to specify the way in which time signatures, pedal signs, rehearsal marks and various other notes are printed.

The printout quality is pretty good - obviously, the best results are produced with a laser. The use of outline fonts certainly enhances the look of the titles and text, although the notes do have a pixelled appearance. Far better results are possible with Score Draw 3 which converts Rhapsody scores into Draw files. This was not yet released at the time of writing.

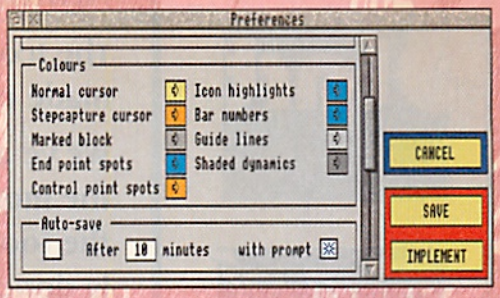
## On song

A Preferences option and a separate Config program allow you to set up the application to your exact requirements. The manual is very comprehensive and is full of useful tips to help you make the most of the application. Many functions can be achieved with keystrokes and these are listed towards the back. On line help is also available via Acorn's help application.

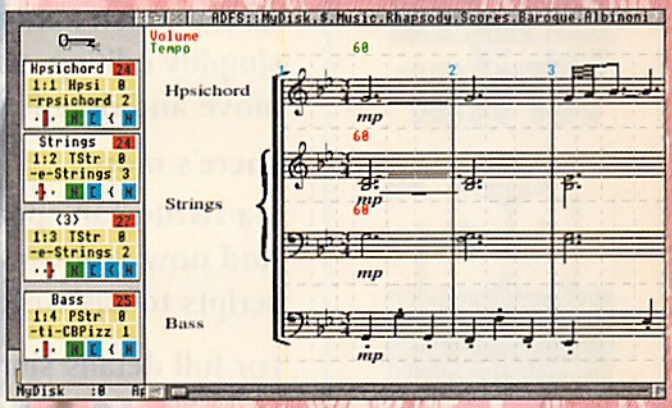
Rhapsody 3 is an impressive application and has more features than I've been able to cover here. It's not perfect and improvements could be made to the text handling and to aspects of the user interface. It's not the sort of program that you can use straight out of the box. You need to read the manual first.

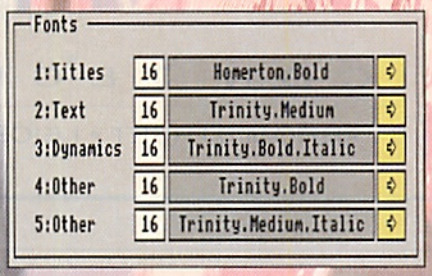
I know of several individuals and schools who have dithered over buying a music processor and instead have waited for the right product to come along. Well, Rhapsody can now cope with all but the most demanding musical requirements. If used in combination with Score Draw, it should produce nigh on perfect results. At £99 including VAT, you are getting a lot for your money. With the release of Rhapsody 3, any waverers can now come down off the fence.

**ALAN BENNETT**

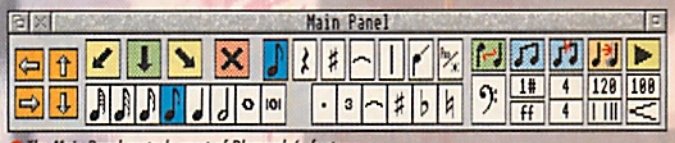



The Preferences window, available via the Icon Bar menu allows you to configure different aspects of the programme's operation

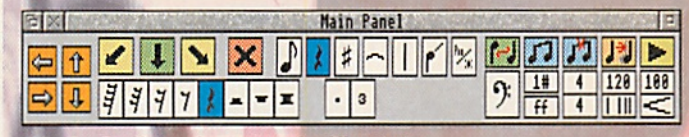


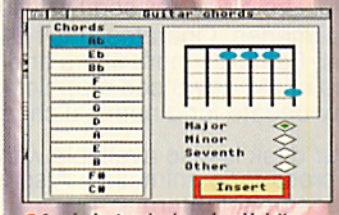

Information of all the stave settings can be displayed at the side of the score




The Main Panel controls most of Rhapsody's features




The Main Panel buttons change as you select different options



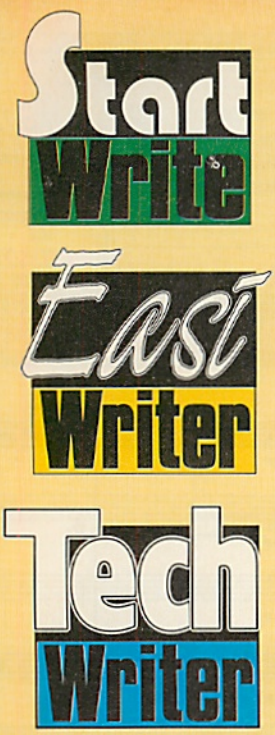

Standard guitar chords can be added. You can devise your own if you wish

### FACTFILE

**Product**: Rhapsody 3
**Supplier**: Clares Micso Supplies 98 Middlewich Road, Rudheath, Northwich, Cheshire, CW9 7DA Telephone 0606 48511
**Price**: £99 incl. VAT
**Additional**: Upgraded from Rhapsody 2: £48 inclusive. From Rhapsody 1: £64 inclusive. A new version of Score Draw will be made available.

**Performance:** ●●●●○
**Features:** ●●●●●
**Value:** ●●●●●
**Overall:** ●●●●○

**Last Words**: The best bet if you want a music processor on the Arc.

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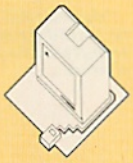

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# By Design

*Computer Aided Design is about more than just having your fitted-kitchen measured up. We look at what CAD can do and which programs are available to do it*

**The classic Computer Aided Design (CAD) program has been somewhat eclipsed in recent years on Acorn computers, by other programs in the same vein as Draw. The perception has been that full blown CAD is for designing buildings and aeroplanes, rather than the patio in the backyard and more modest drawing programs do the latter job just as well and are perhaps easier to use. The RISC OS interface and the incorporation of Draw-like tools however, has brought CAD back into the frame for drawing of all kinds.**

CAD certainly has the edge when it comes to large designs and when precise measurements are needed, measurements which can be reproduced on paper at a later date for use in the real world. For reasons of accuracy, output from a CAD program is usually to a plotter rather than a printer. A plotter draws the lines from the description which the computer holds, retaining the measurement attributes of the drawing on screen.

CAD programs provide drawing tools such as arc, polygon and rectangle and usually fill objects with patterns rather than solid fills, which are difficult to plot. Grids can be employed to force the accuracy of these tools and measurements can be taken from the drawing.

Another important aspect of a CAD program, and one shared by desktop publishing and drawing programs, is the ability to group objects together and to duplicate them. Grouping means that, once finished, a set of related objects can be glued together so that any subsequent operations are carried out on the group. For instance, a single fence post can be drawn, duplicated 100 times and then the 100 posts grouped together so that the whole fence can be moved around and placed on a plan drawing.

Both Draw and CAD type drawing programs can change the size of the drawing without losing quality (except at the very limits) so that, for instance, a screenful of a CAD drawing might show a leisure centre plan from above. Moving in one step reveals the internal walls, doors and windows, moving in a second step reveals lockers, kiosk, poolside features, while a third step shows the lines on the badminton court and the pattern of the tiles in the pool.

Any amount of detail can be contained in the different layers of the drawing. Layers is a technical term which distinguishes between different parts of the drawing. Each layer can contain its own drawing elements and can be viewed individually or together with other layers. Using different colours on different layers helps the recognition of certain types of object.

There are a number of CAD programs available for the Archimedes and we'll make mention of three below as we go through some of the features of a CAD program: WorraCAD, ProCAD and RiscCAD Junior.

## Formats

The Draw format is a standard and so it's no surprise that all the programs looked at here can save their contents as a Draw file. The other important file format is DXF (Drawing Export Format) which is a standard description of drawings introduced by AutoCAD (the world's biggest-selling professional CAD program), to export drawings to other programs. Acorn introduced DXF support into Draw which recognises a limited subset of DXF. All three programs can output in DXF, although all use different file icons. ProCAD can import DXF.

All the programs let you print out via a RISC OS printer driver. WorraCAD and RiscCAD have built-in plotter support while ProCAD works through a separate AOPlotter driver. WorraCAD and ProCAD let you choose an area of a drawing to print.

## Designer's view

The problem which CAD sets the programmers is how to deal with big drawings on little screens and how to cram all the available tools and tool settings (draw relative, draw parallel, etc.) around the drawing window.

WorraCAD provides a single 3D button bar which contains the names of functions and further menus and which changes to the new menu as it's selected. You can move up and down the menu tree with single clicks. This is much easier to use than the conventional RISC OS menu tree. WorraCAD's grouping is well thought out. For instance, if you go to Enquiry to get information about an object, in the same short menu you can save that info as a text file. You don't have to crawl back up to a particular file-related dialogue box.

ProCAD's floating tool bars are icon based and so need more getting used to. Clicking Select chooses a tool for use but clicking Adjust brings up a dialogue box to configure the tool and I found this the easiest method of working. RiscCAD's icon bar is attached to the drawing box, Draw style and this, while it has the advantage of keeping it out of the way, lacks flexibility. The icons are not as well designed as in the rival products or indeed in Draw itself. RiscCAD also disappoints with some actions which don't adhere to RISC OS style.

WorraCAD makes good use of single key presses as shortcuts to menus, for zooming and redrawing (the display doesn't always update immediately after a deletion). ProCAD also uses shortcuts for zooming while RiscCAD uses 47 different key press combinations to select and cycle through modes, choose text styles, save set-up, etc.. WorraCAD has interactive help, ProCAD employs a Message Bar.

When using WorraCAD you can have more than one drawing open at a time but you can't cut and paste between them.

## Objects

Objects are placed into a drawing by choosing a tool, such as a line tool, and using the mouse to position it. The difference between programs comes with the range of tools and the options attached to them. You can enter the position of objects as co-ordinates, either relative to a start point or to other objects.

Construction lines can be used to help establish part of a drawing and are then discarded later. A separate layer can be used for construction lines and then the entire layer removed. All the programs provide layers which you can switch between during drawing. They can all display grids ➤

# ProCAD

**ProCAD is the most recent offering from Minerva Software. After the release at the Acorn User Show last year, of CADdet, a drawing program for the serious amateur, Minerva ProCAD, the draughting program for the professional, in February this year. Computer Aided Design or CAD for short, is one of the fastest advancing fields of software development in the Computing industry today. Laser and satellite mapping techniques and the digitising of old drawings using optical scanning devices are just a few of the more up-to-date devices being used to develop drawings these days.**

ProCAD is intended as a draughting tool for use by professionals of any discipline who require a package that is flexible, advanced, high in quality and relatively cheap (compared to the competition in the IBM/PC marketplace). Well, that's what Minerva say anyway, I'm here to find out if that really is the case.

The package itself is well presented. An A5 format ring boxed ring binder and two 3½ in disks, one containing the program and the other containing sample files and symbol libraries. The installation of the program onto hard disk could not be easier - simply drag the icon from the floppy disk directory to the hard disk one, no messy decompacting!

The manual is in an easy to understand format, fully indexed and comes complete with a tutorial with an example of how to use some of the advanced program features.

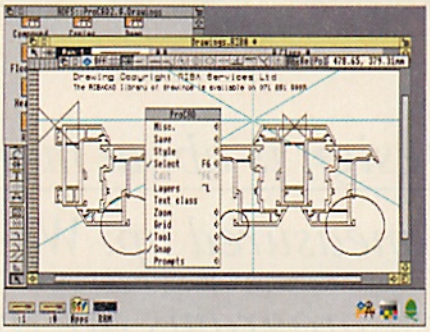
The main program is, like all the others, difficult to understand at first, but as you become aware of its construction and menu layout becomes easier to get to grips with. One of the few problems I found with ProCAD was when a drawing is first opened, either blank or otherwise. In Mode 36 on a standard monitor, the Status Bar disappeared off screen.

## FACTFILE

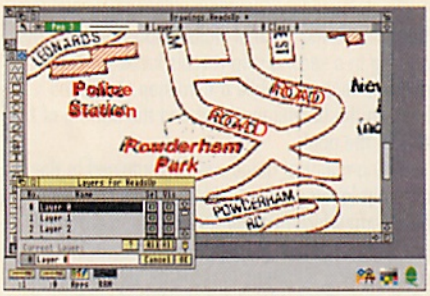
**Product**: ProCAD
**Supplier**: Minerva Software, Minerva House, Baring Crescent, Exeter, EX1 1TL
Telephone 0392 437756, Fax 421762.
**Price**: £495.00 excl. VAT
**Additional**: Site licence availableSupplier:

**Performance:** ●●●●○
**Features:** ●●●●●
**Value:** ●●●●○
**Overall:** ●●●●○

**Last Words**: Top of the range and first choice if you can make it pay its way!



● *Scaled DXF input and output are among the features which put Minerva's program into the professional class*

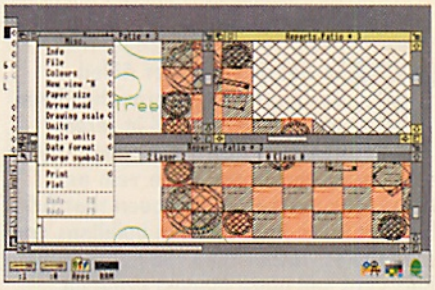



● *Map-making in ProCAD. The scanned sprite is imported to act as a template for tracing the features and adding Ordinance Survey symbols. The sprite can remain in position and is ignored by ProCAD when printing/plotting*

## ProCAD AT A GLANCE

Minerva has two CAD products, CADet and ProCAD, this latter product with A0 plotting ability and enhanced DXF support amongst other features which put into the 'professional' mould. The packaging and excellently produced manual reflects this epithet. ProCAD comes on one disk with an additional disk containing example drawings.

*CADet was reviewed in the May issue of Archimedes World, if you want further details.*



● *Although only one drawing can be worked on at a time, you can choose to have multiple views, split horizontally or vertically. You can also have detail and overview windows which are scale views of the same drawing. Because ProCAD does redraw very quickly I could use these multiple windows on an ARM2 machine with only slight delays*

## ADVANCED FEATURES

| | |
|---|---|
| ***32 Drawing Layers*** | This makes it easier to separate say Architectural components from Electrical and mechanical ones. |
| ***Specialised Area Fills*** | Ordnance Survey (grassland, marsh and trees) and Architectural (brick-work, concrete and paving) fills. |
| ***Symbol Library*** | A library of example car parts or electrical symbols. |
| ***Snap Facility*** | The ability to be able to 'snap' to various key points without using a grid, endpoints or mid-points of a line, to line intersections, to the centre of or tangent to a circle, to be able to draw a line at right angles to another no matter what angle it is at, etc. |
| ***DXF File Input / Output (with Scaling)*** | Drawing exchange format file transfers. |
| ***Automatic Dimensioning*** | If the computer knows the scale to which you are drawing an object it will be able to dimension it to the correct sizes. |
| ***Sprites*** | Sprites can be imported, rotated, mirrored, scaled and moved so that they can be traced over with drawing tools. Sprites are never plotted. |
| ***Detailed Information Reporting*** | The capacity to report the exact size or position of any object. |
| ***Bill Of Quantities Reporting*** | Making it possible to make a report on the contents of a drawing. |

## USER DEFINED KEYS

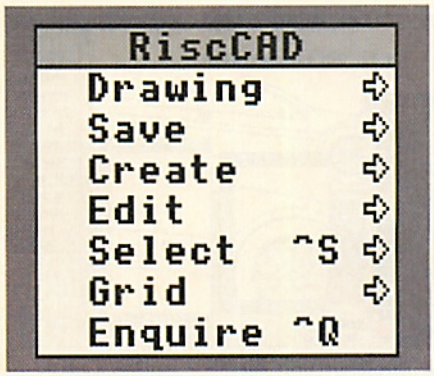
**Multiple Drawings on Screen**
**Multiple Views on same drawing**
**Support of Outline Fonts**
**Concept Keyboard Support**
**Support for HPGL Plotters as well as RISC OS Printers**
**Support for plotters larger than A3 size.**

# RiscCAD

**RiscCAD Junior loads happily from floppy or hard disk, but you need to keep your master floppy around to insert it during the loading sequence. RiscCAD Junior grabs 512K of application space when its icon appears on your icon bar, but it then configures itself to use only 368K on a 1Mb machine (leaving around 400K for a drawing) and 428K on a 2Mb machine. Beneath the RiscCAD Junior icon there's just one menu item, Preferences, a box which offers buttons for hi-res snapbox sprites, for use in Mode 27 and a timed autosave, configurable in minutes.**

Clicking Select opens a drawing window at 10% zoom, at which moment you can get drawing in the top left hand corner with Point, Line, Arc and Circle tools, each with their own modifiers. An arc, for instance, can have a fixed angle, fixed radius, both fixed, divided into parts and parallel. The default zoom of 10% allows for the fact that you are working on large size 'paper' but it does take a bit of getting used to and fitting a whole A3 landscape in Mode 12 means you have to scale down to 3%!

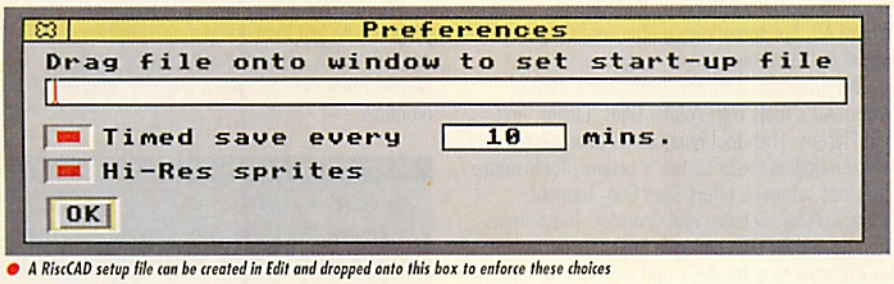
Text can be scaled, angled and added in plain, italic or underlined style. Symbols, from a built-in library of electrical and mechanical items, can be selected from a scrollable list and dropped into position. Once selected (you can select single items, all items, or those visible in a defined window), objects can be grouped, moved, cut and then copied or moved. Objects can be dragged around, Draw style, as well as having their position precisely defined through entering co-ordinates.




● *RiscCAD sticks to the normal menus - no floating or 'sticky' boxes*

The transformations which you can apply to objects are mirror, rotate, scale, magnify, polar array and rectangular array. Selections can also be edited in more detail, redrawing and adjusting lines, for instance.

A toolbox on the left hand side of the drawing area provides a selection of snap types which can be used in conjunction with the drawing tools. The paper size is configurable and you can choose to draw at any scale, thus allowing detail you might not manage in the main drawing area at 1 to 1. RiscCAD Junior can work in millimetres, centimetres, metres, inches, feet and yards; all grids, automatic dimensions and input boxes change to work with a new choice of measurement. Dimensions can be added, manually or automatically to a drawing in 14 styles, with configurable arrow and text size.




● *A RiscCAD setup file can be created in Edit and dropped onto this box to enforce these choices*

Layers can be used to build up a drawing from different elements, a technique which means that global operations can be carried out layer by layer, a sometimes useful restriction. Objects can also be 'hidden' from editing.

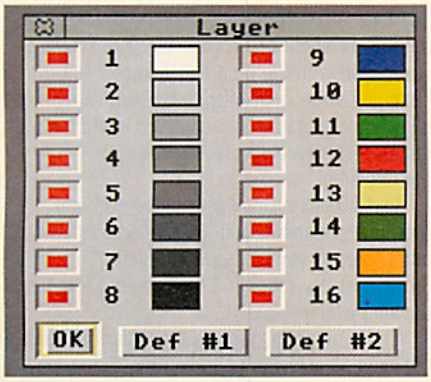
When printing to a RISC OS driver you can scale the drawing, print a grid and print monochrome - useful for line drawings when colours printing as grey tones do little to enhance clarity. Plot supports HPGL and GPGL (for Graphtec plotters) and a Centre plot button supports the use of plotters which have their origin in the centre of the paper.

Saving DXF has an interesting extra which sends rotated text in a format which is correctly rendered in Draw (which doesn't import the rotation value of a DXF text string). RiscCAD Junior can also import DXF but can't handle block definitions. There's advice on exporting appropriately from AutoCAD.

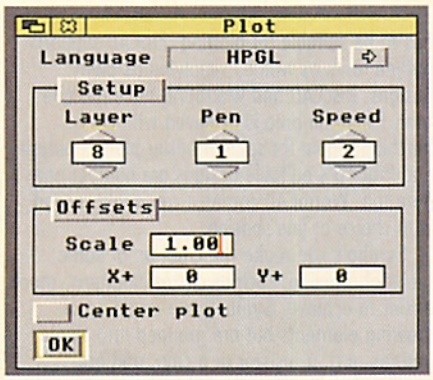
RiscCAD Junior proved itself capable in many respects, especially in the output side. Documentation is not lacking in the RiscCAD Junior package, and you are provided with not just details on each function but two tutorials, hints and tips and the symbol library in print. On the other hand I found it more difficult to use than its competitors. The

## RISCCAD AT A GLANCE

Programmed by a designer working daily in a professional design environment, RiscCAD has been developed to meet practical requirements. It fits into a 1Mb machine with space to spare. Watch out for the professional version which adds many features and at a £130.00 price tag. RiscCAD Junior comes on one disk with example files and five directories of symbols. The manual is comprehensive and well produced and comes with a function key strip and quick reference card.




● *RiscCAD supports 16 layers*




● *RiscCAD's built-in Hewlett Packard Graphics Language plotter driver - a neat setup box*

## FACTFILE

**Product**: RiscCAD
**Supplier**: Davyn The Workshop, off Princess St, Sandal, Wakefield, WF1 5NY
Telephone 0924 254800.
**Price**: £80 excl. VAT
**Additional**: Site licence available

**Performance:** ●●●○○
**Features:** ●●●○○
**Value:** ●●●●○
**Overall:** ●●●○○

**Last Words**: Capable program for the professional designer, competitively priced.

# WorraCAD

**WorraCAD is 512K of application, configurable through an entry in the icon bar menu, for cursor type, grid colours, rubber band limit and decimal places. A4 to A0 plotting is supported while the number of pens and pen speed can be configured to suit your hardware.**

You start a drawing by clicking on the application icon and the size of the drawing area which pops up is determined by which Start-up file - A4 to A0, landscape, portrait, with and without a border - you've chosen. These files reside in the application directory and are chosen from the Configure menu, a slightly awkward process.

The drawing area is chaperoned by an info box, which shows cursor position and the layer (0 to 15) you are working on. A handy Layer box can be popped up where you select a layer, its colour and the active layer to work on.

Menuing over the drawing brings up a conventional menu tree with Misc at the top, filing below, drawing tools, zoom and grid, all very familiar from Draw, et al.

The Hard copy menu extends the print facilities beyond RISC OS drivers to plotting areas, scaling and applying an offset. It is possible to send the output to a file for later down-loading to a plotter on the parallel or serial port. The Enquiry menu lets you interrogate objects in the drawing and can generate a text file describing the objects in terms of their characteristics.

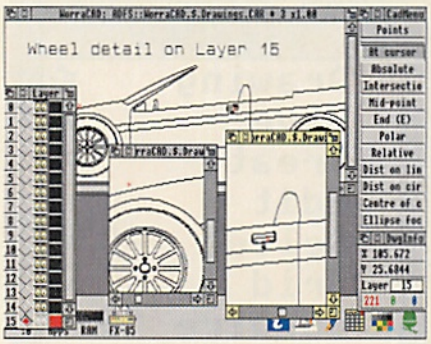
Apart from the menu tree, there's a 'push-button' menu which provides an alternative way of getting to tools and manipulations, handy when there are as many options as there are in WorraCAD, but sometimes a little confusing as to where in the menu tree you've got to.

The Draw menu demonstrates the extent of WorraCAD's tools with Points, Lines, Circles, Arcs and Ellipses. Each tool type has its own submenu which modifies the basic tool's actions, for instance the Lines submenu offers Start End, Tangent, Normal, Polar, Relative and Chamfer. These items then have their own dialogue boxes as necessary, for example to enter the x and y offsets for relative line drawing.

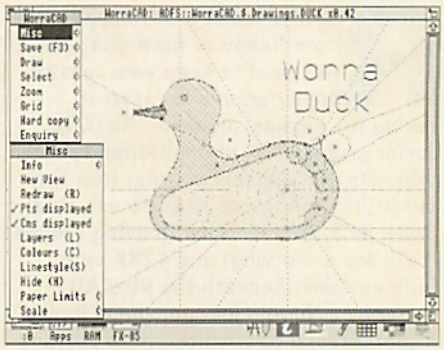
Construction (Cn) lines, etc., can also be called up and dimensions added to the drawing in as many as 11 different styles. One standard font is provided but text can be scaled horizontally or vertically and set at an angle if necessary. Drawing can be carried out relative to a base point or from other reference points.

Objects are not cast in stone so you can select them, mirror them, transform them, group objects together, fill (CAD-speak: hatch) them in, then copy or move them and do so while rotating and duplicating at the same time. It sounds like a juggling trick and, when these facilities are used to their full, drawings can be conjured from just a few repeatable building blocks. When editing, you can choose to 'hide' types of object from your actions to preserve them in their current state.

I found WorraCAD the easiest of the CAD programs to just load and get on with from scratch and this ability combines with a wide range of practical features to make it a highly capable program.




*Three different views, with different zoom factors, onto the same drawing in WorraCAD*




*All WorraCAD functions are available from the familiar tree menu. Note the full file information in the window bar and the scale factor*

## WORRACAD AT A GLANCE

WorraCAD is from Ace Solutions, which was behind the ground-breaking Parametric Design Tool. As the world turned RISC OS, WorraCAD set new standards.

WorraCAD consists of the application, a Translate utility, some sprites, drawings and a substantial tutorial, which takes up 26 pages in the A5 wire bound manual.

WorraCAD is under continuous development and integration with other Ace Solutions products, such as Design Processor, is underway.

## FACTFILE

**Product**: WorraCAD
**Supplier**: Ace Solutions
Cross Park House, Low Green, Rawdon, Leeds, LS19 6HA.
Telephone 0274 620423
**Price**: £99.95 excl. VAT
**Additional**: Site licence £279.80

**Performance:** ●●●●○
**Features:** ●●●●○
**Value:** ●●●●○
**Overall:** ●●●●○

**Last Words**: Highly capable and with a super user interface, making the program usable for a wide age range in education.

Continued from page 31

of different sizes and can force drawing to take place according to the grid (known as 'snapping' to the grid). You can select, group and edit objects with tools after they've been created.

You may be familiar with transformations from using Draw. The CAD programs provide more sophisticated transformations with rotation, stepping with offsets and other tools which can take a lot of hard work out of a drawing while providing the necessary precision. Text has to be treated differently in a CAD program because it has to be suitable for plotting. ProCAD supports outline fonts as well as supplying its own designs, RiscCAD and WorraCAD have the one font. Filling an area is achieved with cross hatching, again for sake of better plotted output and ProCAD's editable designs are number one here too. WorraCAD comes a creditable second with choice of line spacing.

Symbols can make the creation of some types of drawing, such as circuit diagrams, much easier to achieve. Symbols are made up of drawing elements but are grouped into single entities, e.g. a resistor or a chip, and are managed in libraries. ProCAD's symbol management is excellent and a wide range of symbols is supplied with the program. Symbols can even have properties applied to them such as cost, allowing a quote to be prepared automatically for work carried out based on the materials in the drawing.

RiscCAD has a small set of electrical and mechanical symbols built into it and supports cut and paste, so you can save any part of a drawing as a symbol and then paste it into the drawing where required.

All the programs provide means of measuring between objects and of adding the dimension to the drawing.

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# Trade & prosper

*The Micro-Trader Business System is a modular suite of RISC OS programs designed to help you run your business. We tried it out to see if it would give a good account of itself*

**In a small business you work hard, you get on with the business in hand, you give way to customer's demands. You know that keeping proper financial records, tracking cash flow and making budgets is important but there aren't enough hours in the day. Your Archimedes might not be part of your business, but it can certainly look after the paper work if you'll let it. I recently used Micro Trader to look after my business affairs for a week or two to see how it could help.**

Micro Trader is a modular system running under RISC OS. Modules can be purchased separately as required to build up a complete accounting system with payroll administration. Coping with the admin is one part of the equation, the other is the management information, in the form of reports, which can be extracted from the database of transactions.

## Productivity First

The jargon of accountancy and the set procedures demanded by an accounts package often put people off, but Micro Trader is especially worth persevering with because it is truly capable of looking after most aspects of your business.

The windows aren't just for show, the functions within them multitask, which means you can run a report and then continue working, say, filling in an invoice form. And, if an enquiry comes through about stock, you can temporarily leave the invoice and look up a stock item before returning to the invoice.

Windowing is also useful to display reports side by side on screen so that comparisons can be made. Selected areas of text can be saved or printed and documents can be created in Draw or Impression and text exported to these applications. Impression is particularly well catered for because you can place formatting and style instructions into Micro Trader forms and a tab system has been devised to make sure that your columns of figures remain intact when you apply fancy fonts.

Sales accounts are operated on in a database style with record cards that carry full details such as balance, credit limit and settlement period. Invoice production is made easy through Browse and Find buttons for account number and nominal ledger codes. These define the category in which a sale is to be placed, e.g. cash sale or credit card sale. The form is filled in, tabbing between fields for description of goods, etc., and with automatic totalling, VAT and discounts. A sales account is also accessed through forms for entering payments which have been made, credits issued and other adjustments. Statements can be generated at any time.

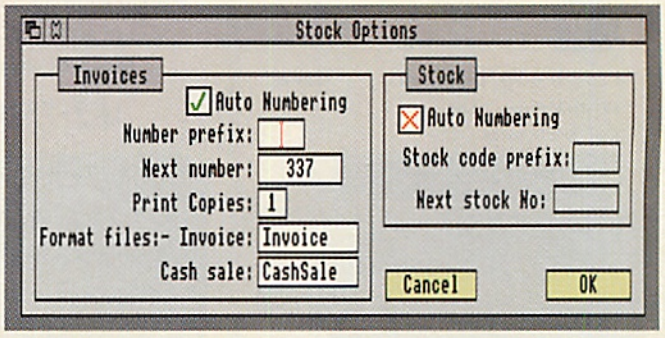
Printing a one-off is as easy as clicking a button. The output can be sent to a dumb reader on screen, printed using standard RISC OS drivers or dragged as a text file into Edit or another word processor. All report output works in this way and there are a number of defined reports such as audit trail (which shows you a list of transactions by date) and aged debtors (who owes you money and for how long they've owed it).

The Purchase department runs in the same way as the Sales side but this is where you spend your money and monitor your bills. Reports tell you who you have to pay and how much. This is the department which is often run by a small business at the end of the month when all the cheques are completed in one run.

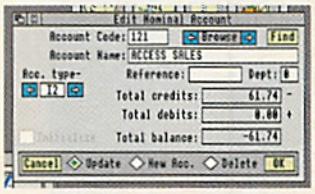
## Management Style

You may think that all your time is going to be used entering details of invoices and bills that are sent to you. You'd have to generate these anyway, so Micro Trader should improve your efficiency and perhaps presentation too. Bills received do have to be entered, but the on-screen forms help this process and, if you deal with the same suppliers over and over, you don't have to enter their details more than once, the new figures are simply added against their account. Of course, all the data is then available to generate reports on the state of your business; well worth the effort.

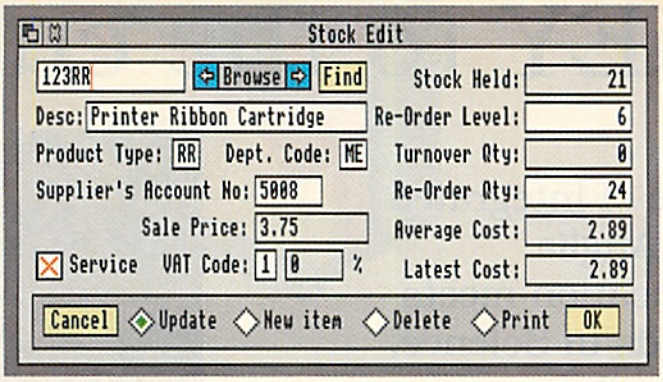
Back to Micro Trader's main panel and the Nominal ledger where your business is looked at from a more overall view, combining the sales and purchase side with bank records and stock adjustments. This is where




*One of a number of options boxes which allow you to configure the program for your precise requirements*




● *The nominal ledger is where the figures come together*




● *If you work with stock, then each item and its status is detailed here. The service box is selected (ticked) if you provide a service for which you charge an hourly rate. One very good reason for computer accounts is the dreaded VAT administration. Micro Trader takes all the figures you have already entered and produces the figures precisely as required by the form which the VAT man sends you. The need for upgrade support is highlighted by this panel which has recently had to change to take into account the EC single market*

● *The official title of the software is The Micro-Trader Business System and you can see the modular nature of the suite reflected in this main panel. Note that payroll is greyed out and unavailable in this version*

**FIGURE 1**

```
!     Label Format File
!     To list only those
accounts with a current
balance
#SELECT SL 1
#WHILE SL
#IF !((SL6+SL7+SL8+SL9)=0)
!   Label layout.  Label
pitch, 30 chars x 8 lines.
!
# length = 28
# margin = 2

@margin{SL1:<length}
@margin{SL2:<length}
@margin{SL3:<length}
@margin{SL4:<length}
@margin{SL5:<length}


! End of label.
#ENDIF
#NEXT SL
#LOOP
```

● *An example of the C-like programming language*

**FIGURE 2**

```
!    Form File to print a
membership list
!    from the ClubList
database
!

Membership No {M0}
Name          {M1}
Address       {M2}
                 {M3}
                 {M4}
                 {M5}
Telephone No  {M6}
Subscription  £{M7}
Date Paid     {M8}.


!End of report.
```

● *A simple report layout in the underlying programming language in Micro Trader*

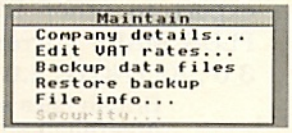
your profit and loss report will come from, where the VAT routine is run to fill in your form for the Excise man and where your annual audit (password protected) will take place. Any entry made in your Sales or Purchase ledgers is also made in the Nominal ledger, thus the double-entry epithet. Of course you only enter the data once, the software will duplicate the data automatically.

Micro-Trader contains a stock module. If your business involves selling stock, stock lists, re-order lists, etc., will be very useful. For service businesses it is possible to use the stock control module to define types of job and their value per hour spent, values which can then be entered automatically into invoice lists. Professional services can add a narrative which explains what is being charged for.

The Mailer module provides access to the customer list which you build daily on the system. If you have a small number of clients this may not be useful but if you're running a mail-order operation, you can use the names and addresses to communicate with your existing customers.

The Maintain module is used to edit VAT values, etc., and to manage files. It includes a backup and restore routine, vital for any accounts program and an information panel about files and file sizes. I operated a small demonstration data file from floppy disk for this review but hard disk operation is desirable since MT accesses the disk whilst in use and will generate a fair amount of data for even a small business during a year.

For anyone who is happy with programming and likes to customise applications, Micro-Trader has a complete language containing variables, commands and structures. These can be used to create your own reports and for exporting data to a spreadsheet, useful for building cash flow forecasts and other "what if" scenarios.




● *Some vital setup and backup procedures come under the main panel heading of Maintain*

Formatting commands enable you to match your on-screen Micro-Trader documents with your business stationery. If you are setting up and prefer to use your time on other matters, PRES will create the forms for you if you send in your stationery. This service costs from £20.00 (plus VAT). Full product support is also available on an annual basis at £34.00 (plus VAT).

## Understood?

The documentation is so comprehensive that, if you purchase all the modules, it is literally bursting out of the original binder and it is recommended that you read the introductory parts and then store them away. The quick reference guide is invaluable to the user who knows how to use his/her Archimedes but needs to be pointed in the right direction when it comes to processing a financial transaction.

Frankly, documentation of this nature is required when tackling a comprehensive accounts program of this kind. Having used the market leader from Sage on a PC, I am happy to report that the MT documentation is superior. Each aspect of the program suite is not inherently difficult to use but there are subtleties of accounting practice which may need to be learned alongside the computerisation process. I am happy that MT will help you out in this respect.

Applications based on the MT engine that you are likely to see in the future include an administration program specifically designed for schools, with both accounting and pupil management. MT is also going to be integrated with an advanced electronic banking system which UK banks are devising so that your accounts can link in with your cash at the bank and monies can be transferred to and fro' without paper, pen or envelope. The phrase "your cheque is in the post" is doomed. PRES is also developing a sophisticated project management program and is doing a generally good job of projecting RISC OS into the business community.

When choosing a business program you have to weigh capability with price and, as part of your decision-making, I'd recommend you think at least 12 months ahead and try to imagine the maximum capacity you will require at that time and the sort of management reports you will need to effectively manage your business.

From my encounter with Micro-Trader, I feel sure that it can handle a growing business and the user interface makes it a joy to use after prolonged exposure to PC type programs. There's a demo version available so you've got nothing to lose by giving it a try. You may even get a holiday next year.

**MARK WEBB** ●

**FACTFILE**

**Product**: Micro Trader
**Supplier**: PRES, PO Box 319, Lightwater, Surrey, GU18 5PW. Telephone 0276 472046
**Price**: Complete system £279.00
Mailer £49.95
Nominal £79.95
Payroll £124.95
Purchase £79.95
Sales £79.95
Stock £79.95
**Additional**: Comprehensive demonstration disk available. Site licence on request. All prices are exclusive of VAT

**Performance:** ●●●●●
**Features:** ●●●●●
**Value:** ●●●●●
**Overall:** ●●●●●

**Last Words**: Powerful double-entry accounts program, easy to use and very well documented. Suitable for any small to medium sized business.

# The KEY to the curriculun

The KEY range of integrated software from Anglia Television Education meets classroom needs in Science, History, Geography, Languages, English.... at all ages. And its uses extend far beyond the classroom.

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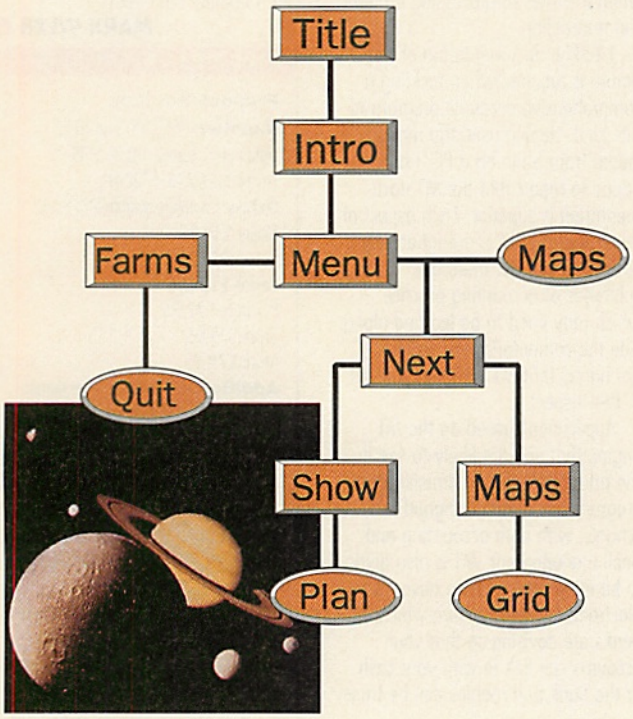

## KEY PLUS MAPS

Point location and "features" from KEY datafiles now plot to interactive maps - and export to other RISC-OS applications. KEY PLUS MAPS currently work with KEY PLUS 3.0 , KEYNOTE 2.0 and KEY CALC 2.0.

British Isles suite World suite
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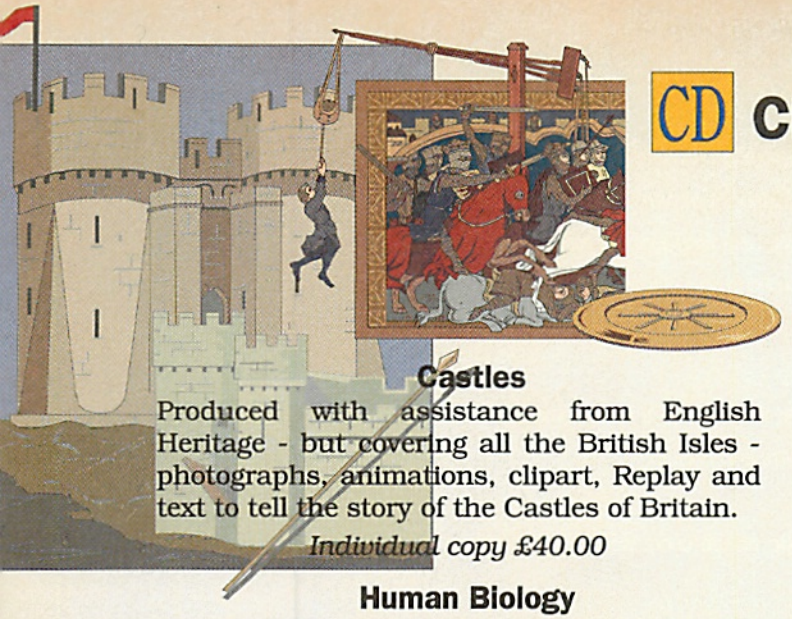

# CD CD-ROM

## Castles

Produced with assistance from English Heritage - but covering all the British Isles - photographs, animations, clipart, Replay and text to tell the story of the Castles of Britain.

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## Countries of the world

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A major KEY PLUS datafile on CD-ROM. Photographs from the world-renowned Hulton Deutsch collection, with text and pictures designed to support classroom research.

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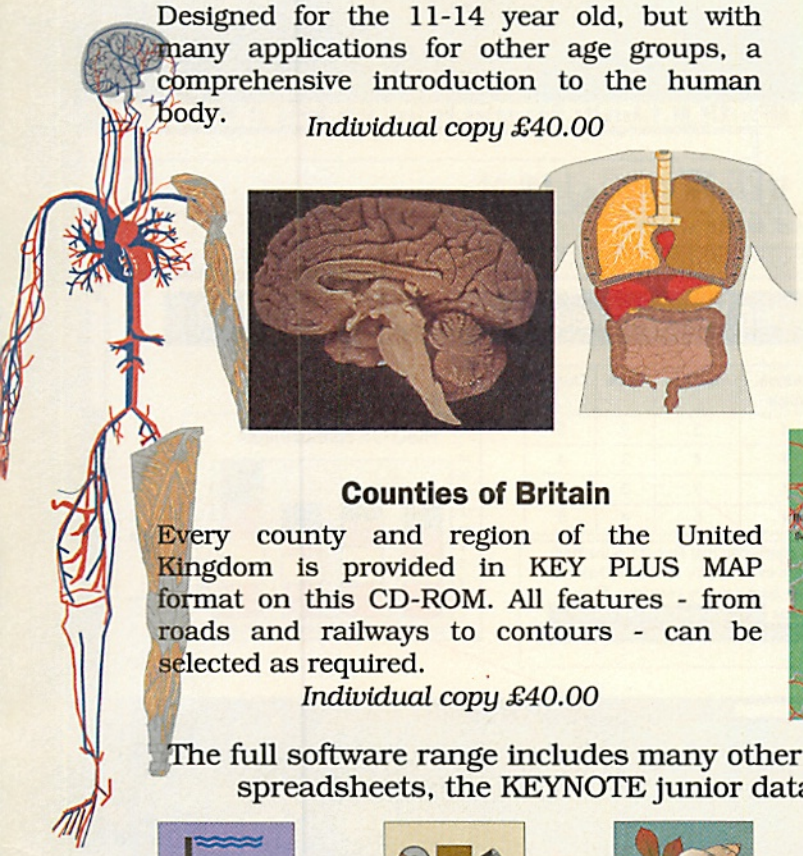
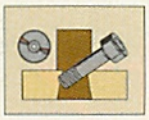


## Counties of Britain

Every county and region of the United Kingdom is provided in KEY PLUS MAP format on this CD-ROM. All features - from roads and railways to contours - can be selected as required.

*Individual copy £40.00*

The full software range includes many other programs - the KEY CALC and KEYCOUNT spreadsheets, the KEYNOTE junior database, distribution mapping and more.



## *The KEY datafile range*

| | |
|---|---|
| Energy | Railways (East Anglia) |
| Placenames | Railways (East Midlands) |
| Viking World | Railways (South Midlands) |
| Antarctica | Railways (West Midlands) |
| North Sea | Railways (West Yorkshire) |
| Inland Waterways | 19th Century Biographies |
| Sea Trade & Empire | Ironbridge Gorge - Coalbrookdale |
| Leaving the Planet | Nelson's Navy at Trafalgar |
| Rocks & Minerals | Our Neighbours in Space |
| Weather & Climate | Birds of Britain & Ireland |
| Periodic Table | Freshwater Fish of Britain & Ireland |
| Mammals of the World | Mammals of Britain & Ireland |
| Prehistoric Animals | Minibeasts of Britain & Ireland |
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*Recent additions include: In Tudor Times; The Earth in Space; Materials, Components and Techniques; The Civil War.*

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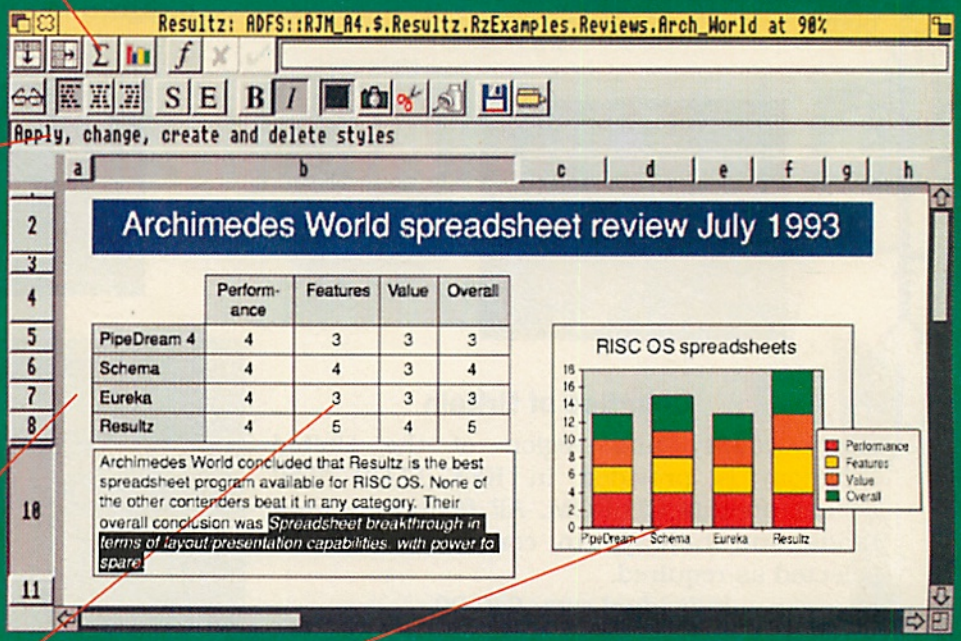
*Leicester and Africa map © Bartholomew 1993, Planets photo courtesy NASA, Queen Victoria and Van Gogh © Hulton Deutsch Collection.*

New from the Archimedes' spreadsheet experts comes Resultz, the ultimate spreadsheet for RISC OS.

It's packed with powerful features to help you work fast, whether you're working on a classroom project or managing your business.

It recalculates faster than any competitor, and uses background recalculation so that you're never waiting for the computer to catch up. It will automate your work with the *Fill* and *Autosum buttons* - just select a group of numbers and Resultz writes a formula which adds them up automatically.

Resultz isn't just for power users. It's designed to help novice users work productively. Interactive help makes it easy to use Resultz' comprehensive set of functions. Every time you pick one of the 190 built-in functions from the selector, *tips on using it appear on screen.* Your data will look better than ever, with colourful charts incorporating your own pictures. Unlike other spreadsheets, Resultz shows your pages on screen, so what you see on screen is exactly what will print out on the page (we call it *spreadsheet DTP*). The style editor places fonts and formats at your fingertips. It's easy to build *tables* and *forms*, and to add *charts* or *pictures* to worksheets. And Resultz is just £119+VAT.




Resultz and Wordz are the first members of the FireWorkz suite of programs, designed to share the same intuitive easy-to-use interface, and to make it easy to share data between word processor, database and spreadsheet. . . . . ..when you need Resultz, send for your free brochure and demo disc

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2 Signet Court, Swanns Road,
Cambridge CB5 8LA
Telephone 0223 311881
Fax 0223 312010

# Reviews

DRAWING

## Hatchback

**Supplier**: 4Mation
14 Castle Park Road, Barnstaple, Devon EX32 8PA
Telephone 0271 22974
**Price**: £35 excl. VAT, including a free site licence

**Performance:** ●●●●●
**Features:** ●●●●●
**Value:** ●●●●●
**Overall:** ●●●●●

**Last Words**: Invaluable to anyone who uses Draw files.

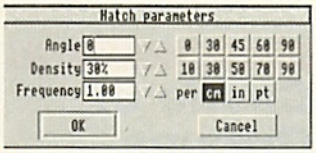
**You know the feeling - you've produced a desktop published masterpiece which includes a number of Draw file illustrations. It's sent to your trusty black and white printer and then disappointment - graphs that looked so polished, so colourful are, on paper a collection of flat, monochrome tones. The trouble is that the most vibrant red when seen in black and white, becomes just another variation on the theme of grey.**

However, help may be at hand in the form of Hatchback from 4Mation. This is a utility that allows you to add hatched effects to any Draw file. Different patterns can be used as a substitute for each colour shade so that when the image is printed out on a mono printer, each hatched area is clearly distinguishable.

The application comes on one disk and is accompanied by a simple manual. Before loading the program for the first time you must first go through a registration routine. Once you have entered the appropriate details you can make copies for use either as an individual or within a purchasing institution.

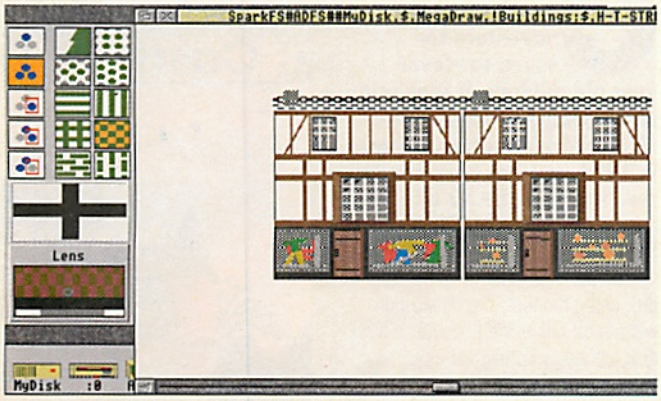
Hatchback uses about 350k of RAM and will sit quite happily on the icon bar until a Draw, Poster or Compressed Draw file is dropped onto it. More than one image can be worked on at once, with each displayed in its own window.

Next to the application window is a toolbox. At the top are icons representing each of the various patterns or chloropleths that can be used. For the most part they are different arrangements of spots, lines and dashes, although a solid fill, a grid and a check design are also on offer.

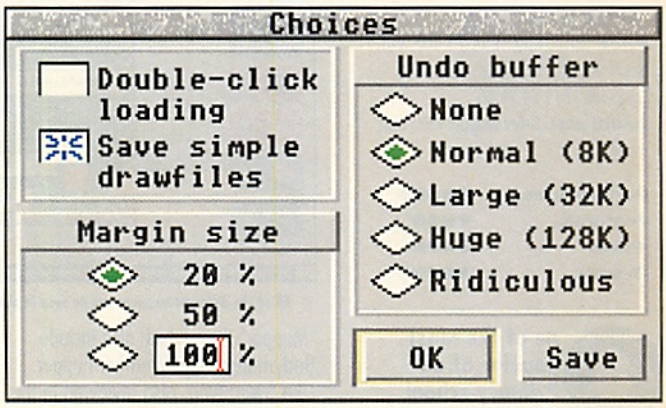



● *You can change the hatch parameters to change the overall effect*

Next to the pattern icons are buttons that allow you to specify the area to which the shading will be applied. You have the choice of either Local, which allows you to restrict the change to the object beneath the pointer or Global, which changes all objects that share the same colour as the one under the pointer. Three other alternatives allow you to drag a box over the image with the mouse and apply shading to objects either within, beneath or not within the box.




● *You can apply hatching to any Poster or Draw file*




● *The Choices dialogue box enables you to configure the size of the undo buffer*

If you press the Menu button over the toolbox, a Hatch Parameters dialogue box appears. This allows you to specify the angle of the pattern, the density or ratio of foreground to background colour and the frequency with which the pattern is repeated every centimetre, inch or point.

At the bottom of the toolbox is a lens. This gives a magnified view of the area underneath the pointer. Above this is a box that displays the current foreground and background colours. By default these are black and white respectively, although either can be changed to any one of the 256 colours or shades of grey by using the Replace option in the Operation sub menu.

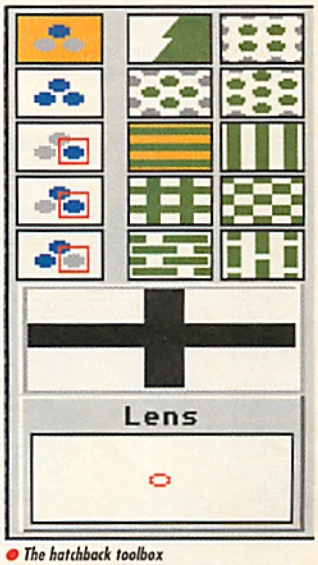
To shade in the desired area, you just click on it with Select. The process is not instantaneous - the smaller the pattern, the longer you have to look at the egg timer. To undo or redo the changes, press F8 or F9 respectively. If you click Adjust on a shaded object, its pattern becomes the currently selected pattern. This allows you to copy an effect within the same image or from one window to another.

The Main Menu duplicates all toolbox functions. In addition, there's a Lock option that prevents further changes being made to a picture as well as the ability to toggle between Full View and Zoom modes. The former ensures that the whole image is displayed within the current window, whereas the latter enables you to zoom in on small details. Files can be saved in Draw, Poster or Compressed Draw formats and used in other drawing and DTP packages. The Choices dialogue box on the Icon bar menu allows you, amongst other things, to configure the size of the Undo Buffer - the larger the buffer, the greater the number of changes that can be stored in memory.

The manual is well written and explains in clear terms how to make the most of the application. At the back is a set of useful diagrams that illustrate the effect of changing both the frequency and density of the different patterns. There are also a couple of directories of example files on the disk.

Hatchback is an essential utility for anyone who uses Draw files. It can enhance not only clip art but also maps, graphs and technical illustrations. Hatchback may be small, but once you're hooked, you'll wonder how you ever managed without it. Go faster stripes will never be the same again...

**ALAN BENNETT** ●




● *The hatchback toolbox*

EDUCATION

# Homemapper

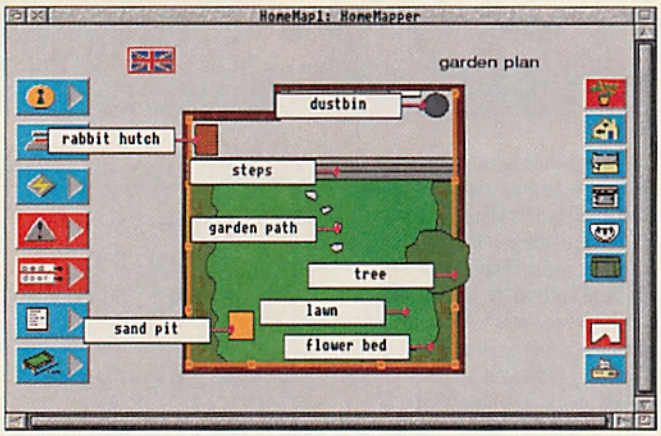
**Supplier**: TAG developments, 28 Bents Road, Sheffield, S11 9RJ Telephone 0800 591 262
**Price**: Single user - £44.95 excl. VAT. Small site (2-5 machines) £89.90. Large site (6+) £134.85
**Additional**: Other Mapper titles also available.

**Performance:** ●●●●●
**Features:** ●●●●○
**Value:** ●●●●○
**Overall:** ●●●●○

**One of the most popular of all Primary school topics is Houses and Homes. Why? Well, the vast majority of us live in a dwelling of some sort, houses have changed throughout history, they are different in other parts of the world, they are made of countless bricks and/or other building materials, they can be haunted, fun, made out of cardboard (literally in some cases)... the list goes on. It doesn't take long for most teachers to realise that they can cover a lot of subject areas in one fell swoop.**

One problem was that until the arrival of Number 62 Honeypot Lane and SpEX, the excellent 3D design package reviewed in the September 93 issue of Arc World, very little in the way of inspiring software had been produced to help prop up this mainstay of the Primary school curriculum.

Thankfully, the situation is changing; the latest title to hit this burgeoning area of the software market is Homemapper from TAG developments, one of a series of 'Mapper' titles which also include Bodymapper and Weathermapper. Like Swimming, also reviewed in this month's issue of Arc World, it has been created using Genesis 2. However, Homemapper keeps its feet firmly out of the water in that it aims to encourage children to look at and think about their surroundings and gives them the opportunity to collect and collate information about their homes and the way they live.



All of the different locations can be seen in plan view

## Hard lines

The package consists of three disks and a ring bound manual. Thanks to the Install application on disk 0 (I would have called it disk one myself, but the manual does insist - never mind) installing Homemapper onto a hard disk is a straightforward procedure. The program will also run straight off the floppy disks although they will need to be backed up first.

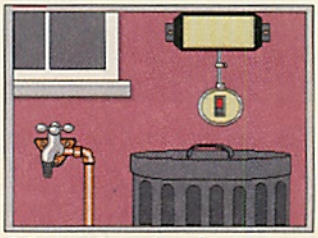
The application uses nearly 600k of RAM, which makes things tight for those still stuck with 1Mb machines. When you load the application, a window pops up and gives you the opportunity to start the program or alternatively change any of Homemapper's settings, provided you enter the correct password. If you forget it, then never fear, because it is cunningly hidden on the first page of the manual.

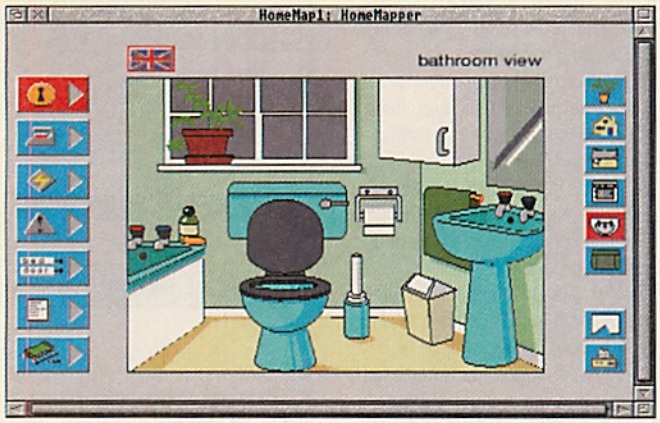
Homemapper runs in its own window, although you can configure it so that it takes over the whole screen. You start off with a front view of the home in question, although if you double click on any of a set of icons on the right hand side of the window, you can view the garden, bedroom, kitchen, bathroom or sitting room. Below these are buttons that enable you to switch to a plan view or print out the current screen.

## Bath time

Icons on the opposite side enable you to zoom in on particular aspects of the room's design. The tools button focuses on the tools and materials used in that particular area. If you are in the bathroom you are presented with a view of the wash basin and its associated clutter such as toothbrushes and toothpaste. Other icons focus on the services used in the area and factors contributing to basic home safety.

A label button will either label the different objects for you or allow you


Services going into the garden



A view of a nice clean bathroom

EDUCATION

# Castle of Dreams

**Supplier**: Storm Software Coachman's Quarters, Digby Road, Sherborne, Dorset, DT9 3NN Telephone 0935 817699
**Price**: £25.99 inc. VAT

**Performance:** ●●●○○
**Features:** ●●●○○
**Value:** ●●●○○
**Overall:** ●●●○○

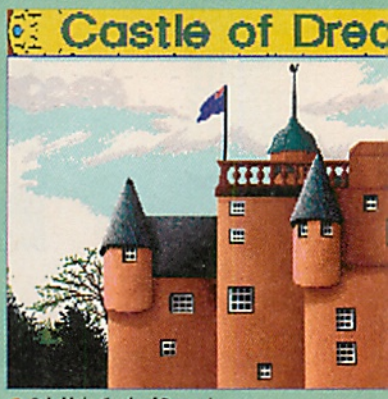
**Last Words**: With a few improvements it could be a lot better.

**Castle of Dreams is an educational adventure for seven to eleven year old children. It was originally published for the BBC 'B' by Widget Software back in 1984, but has now been rewritten for the 32 bit Acorn machines by Storm Software.**

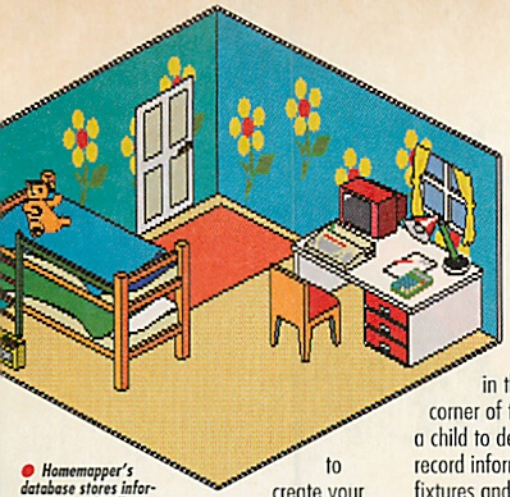
The package consists of a single disk and a manual. The application will run off either the floppy or a hard disk, although installation onto the latter is a little complicated because you have to reset the paths used by the CFS Reader application used to decompress some of the program data. There is no easy way to do this and you have to delve around inside various sub directories. A more elegant solution needs to be found.

Can you crack the code of the parchment scroll?

Castle of Dreams takes over the whole screen and the review version wasn't that adept at quitting the application cleanly. There was always a SWI... not known error message and very often I was dumped in the



Behold the Castle of Dreams!



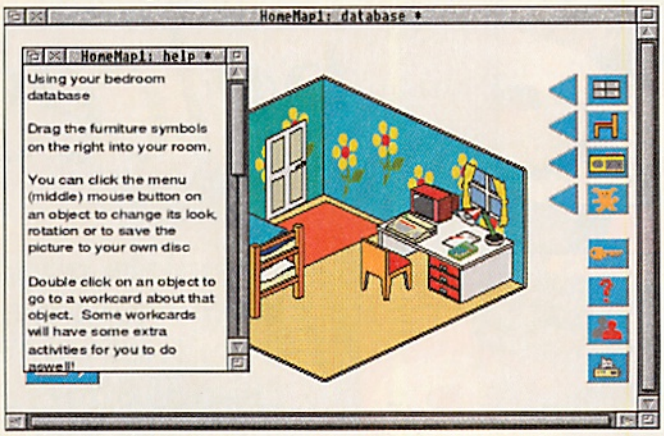
Homemapper's database stores information graphically

to create your own. There's also the facility to read about or write about the things that you can see. In either case, the resulting text can be saved as an edit file and used in other applications.

The image quality is excellent. Any view can be saved as a Draw file by using the appropriate option on the main menu. If you work your way through all of the different areas of the house you can end up with a lot of information. It certainly isn't the sort of task that can be completed in one session.

Homemapper is more than a guided tour of a typical semi-detached dwelling in that it also has a built in database. This consists of a separate set of screens, accessed by clicking on a 'bed' icon in the bottom right hand corner of the window, that enables a child to design a bedroom and record information about the sort of fixtures and fittings they have in their own bedroom at home. Each child's data is stored separately and it helps if the class names are set up in advance by the teacher using the settings window. Once this is done, all the child has to do is click on their name and then they are away.

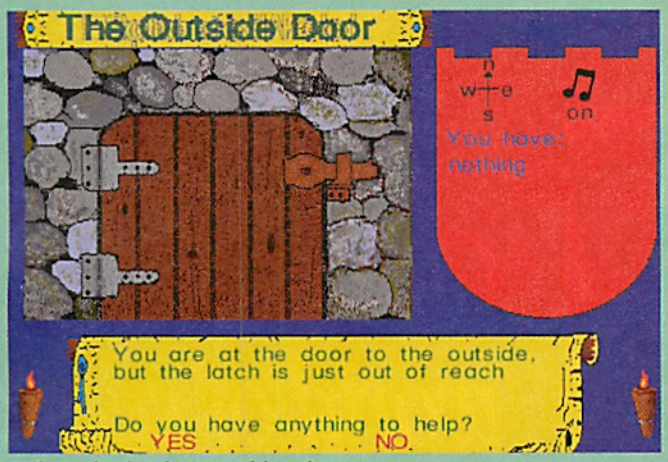
The first thing you must do is design your bedroom. On the right hand side of the window are icons that enable you to choose the furniture, windows and other trappings that you wish to include. Individual objects can be dragged into a 3D view of the room and then be moved around until they are in a suitable position. It's then possible to rotate or delete them by using the relevant items in the Item option on the Main menu.




Help is always to hand

Is this lounge safe?

If you double click on any object in your room you are taken to a workcard. This is where you record, with the aid of copious menu lists, the colour, material and dimensions of, say, the chair that you have at home. You can also record your own personal thoughts as to why you like ➤



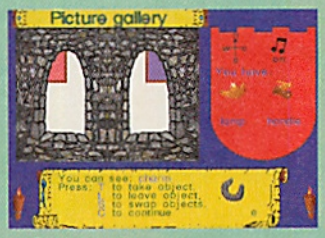

The very door that takes you out of the castle

wrong screen mode. The adventure itself is quite straightforward, though challenging nonetheless. The idea is to go into the castle and find, then throw a casket, full to bursting with spells created by the evil magician Klingsor, into the fiery mountain. There are several puzzles that need to be solved before you have any hope of completing your task, although help is at hand in the form of Kundry who, if you press H, puts useful tips on the screen.

Most of the puzzles are quite tricky - I had trouble sorting out the men by the enchanted pool! If your brain power is lacking you can give up by pressing escape, but you'll still have to come back and complete the task later.

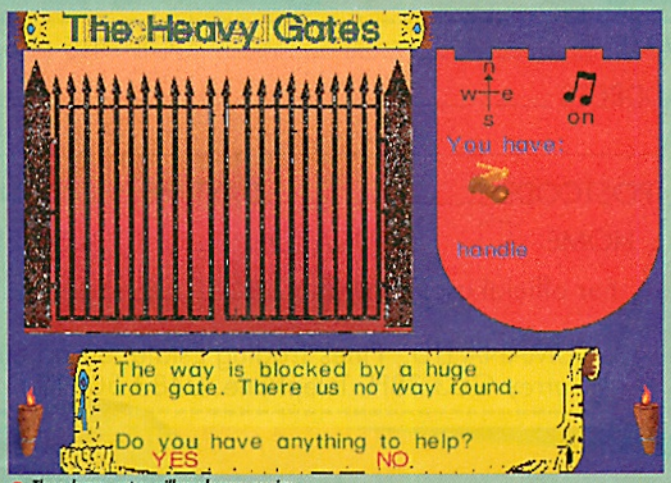
Movement is controlled either by pressing N, S, E or W or clicking on the points of a compass in the top right hand corner of the screen. Most of the puzzles have their own set of control keys. The graphics quality is reasonable although Castle of Dreams doesn't compete with any of the more recent releases from 4Mation.

At the top of each screen is a title bar; although this changes as you go into each room, an imprint of the previous text is left behind, which is rather annoying to look at.




The picture gallery

This group of men hanging around the enchanted lake need sorting out..




These heavy gates will need some moving

The manual with the review copy was inadequate in that it hadn't been updated to take account of the new features of the 32 bit version. No mention was made of the finer points of using the mouse, nor the save and load game facility. Although using old manuals may save the manufacturer money, it's not fair on the user.

If you want a challenging adventure for your children, then Castle of Dreams is worth buying, provided that you can put up with the niggles and quirks. Hopefully, these will be sorted out in future versions.

**ALAN BENNETT**

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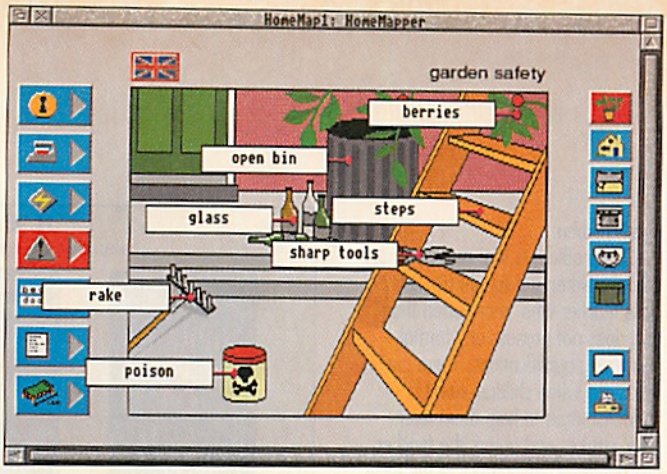
having the chair. Some workcards have other related activities; these can be anything from problems that need to be solved to sending 'electronic' letters to another member of your class.

As each child will eventually generate a fair amount of information, there's the facility to perform a simple search of the class data in order to find out a wealth of useful information such as how many have red wooden beds and so on. This process is menu driven and takes place in a separate window, while you can also go and look at other children's bedrooms provided that the child concerned hasn't locked it with a password.




Labels can be added to any of the pictures

The manual is clearly written and has lots of illustrations and ideas as to how Homemapper can be used in the classroom. By using the Settings window at the beginning of the program you can alter the font used in the read and write window, configure either a full screen or window display and edit the names of children in the class. Homemapper is probably the best Genesis application that I have ever seen. It's flexible enough to be used either as an environment for children to explore or as a basis for more directed activities. Everything flows very smoothly and you don't have to wait too long for the next page to be prepared. The database may not be as flexible as, say, Junior Pinpoint, but it does have a refreshingly different approach.

Like Swimming, Homemapper would benefit from being put on CD ROM. However, unlike Swimming, it is worth buying now.

**ALAN BENNETT**

AUTOMATION

# Report Writer

**Supplier**: DigiTech Computing, 20 Downing Crescent, Bottesford, Scunthorpe, South Humberside, DN16 3LS.

**Price**: £24.99

| | |
|---|---|
| **Performance:** | ●●●●● |
| **Features:** | ●●●●● |
| **Value:** | ●●●●● |
| **Overall:** | ●●●●● |

**Specialist software is now benefiting from a high standard of presentation and user interface. This is thanks to RISC OS, and DigiTech Computing's Report Suite is an excellent example of what can be achieved. The modular approach with three specific applications sharing text-based data is typical and appropriate.**

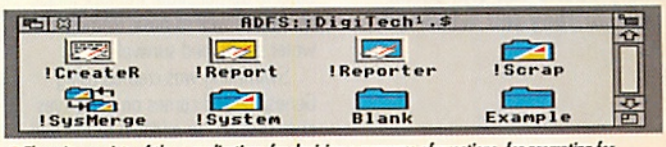
The suite of programs allows you to create a set of questions which are then displayed with prompts, responses are logged and a report is created as a text file which can then be printed or formatted further in a word processor or DTP program. Uses which come to mind immediately are multiple choice tests, marketing questionnaires and experiment check lists.

While responding to a question, the user has use of the reporter window which can be automatically opened by a question and which contains optional answers or helpful data. Responses can be typed in directly or clicked on in the reporter window when hot-linking is enabled.

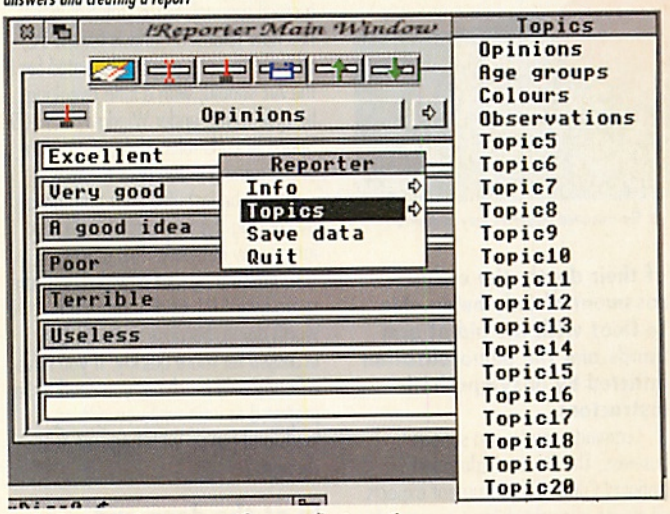
The result is a set of questions and responses in a text file, in one of the different formats offered. This is an ideal tool for creating multiple choice style exercises on screen and I can imagine using it on a portable, out in the field, to prompt for observations, measurements or assessments. A report created in a set format in this way can easily be imported into a database for data collection over a period of time or by a group of researchers.

Although of limited scope, Report Suite performs its tasks well and may find a wide audience in schools. Users will be pleasantly impressed by its ease of use.

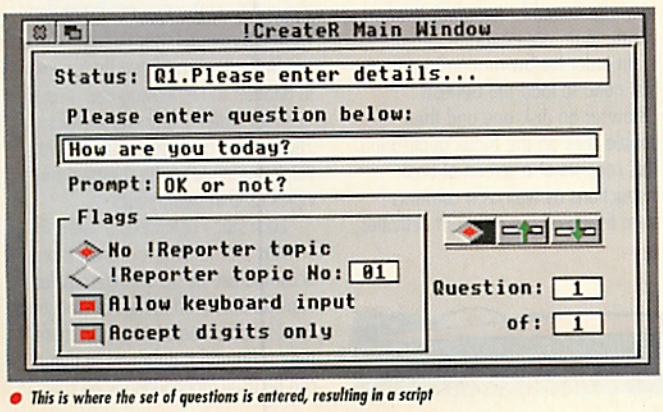
**MARK WEBB**



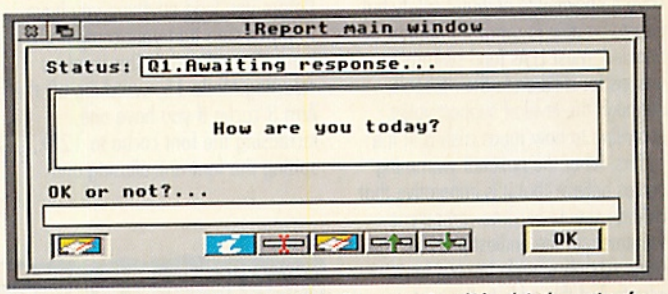

The suite consists of three applications for devising a sequence of questions, for prompting for answers and creating a report




This floating window acts as an aid to responding to questions




This is where the set of questions is entered, resulting in a script




The previously created script drives a question and answer session which ends in the creation of a report text file. There are many permutations on the report format, set up through a simple to use dialogue box

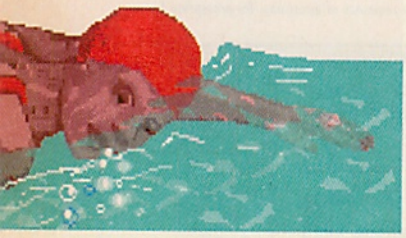
EDUCATION

# Swimming

**Supplier**: CD Sports Ltd.
4 Wirral Business Centre, Dock Road,
Birkenhead, Wirral L41 1JW
Telephone 051 691 0893
**Price**: £35.95 excl. VAT

| | |
|---|---|
| **Performance:** | ●●●○○ |
| **Features:** | ●●●○○ |
| **Value:** | ●●○○○ |
| **Overall:** | ●●○○○ |

**Depending on who you talk to, childhood swimming lessons are remembered either with fond nostalgia or a sense of abject terror. Very often you are regaled with tales of how particularly unpopular teachers met a watery end or the uproar that resulted from covert missions into the girl's changing rooms. However many adults can still recall the fear they felt when out of their depth, the embarrassment of only being able to float with the aid of arm bands and the demoralisation inflicted by unsympathetic instructors.**



● *The animated sequences vary in quality*

Learning to swim is a serious business. The Physical Education National Curriculum document expects all eleven year old children to not only have a knowledge of water safety but also to be able to swim 25 metres unaided. Most LEAs fund swimming lessons for children in their schools, although the level of support varies according to how much cash is in the coffers. All of the national swimming bodies believe that it is imperative that children should become competent swimmers at the earliest possible age - some schools provide lessons for infants, but this adds to the cost, so most focus their attention on Junior aged children.

One problem is that many Primary school children are taught by their class teacher who, more often than not, does not possess any formal swimming qualifications. There are occasions when children need specialist input to help them learn basic strokes and unless the teacher has a detailed awareness of the techniques involved, a child's understanding may be impaired.

## Taking the plunge

It was inevitable that someone would try to use computers to help children learn to swim. On the surface this may seem to be a rather daft idea, but the arrival of CD ROM and Full Motion Video means that it is now possible to incorporate high quality animations and video clips to illustrate the constituent parts of individual strokes.

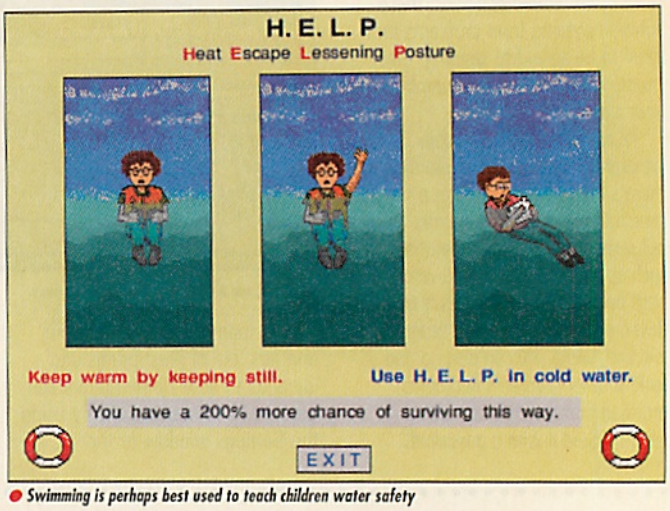
Swimming, from CD Sports of Birkenhead, wins the prize for being the first aquatic application to hit the Acorn market. It's a multimedia package which uses over 40 animations to demonstrate the four major strokes as well as basic elements of water safety and survival

Swimming was created using Genesis 2 and comes on eight (yes eight!) disks. In addition to this veritable mountain of plastic you also get a small manual. Since Oak Solutions has now released Genesis for the PC, any applications originally created for the Arc should, with a little tweaking, be able to run under Windows 3.1. CD Sports intends releasing a PC version of Swimming in the near future.

It can be installed on a hard drive by copying the contents of each disk into a new directory. This process is time consuming, but provided you can spare over 5Mb of disk space it is worth doing, because data can be accessed far more quickly. If you have a floppy only machine, you need to be prepared to wait while everything loads and put up with frequent disk changes.

## In at the deep end

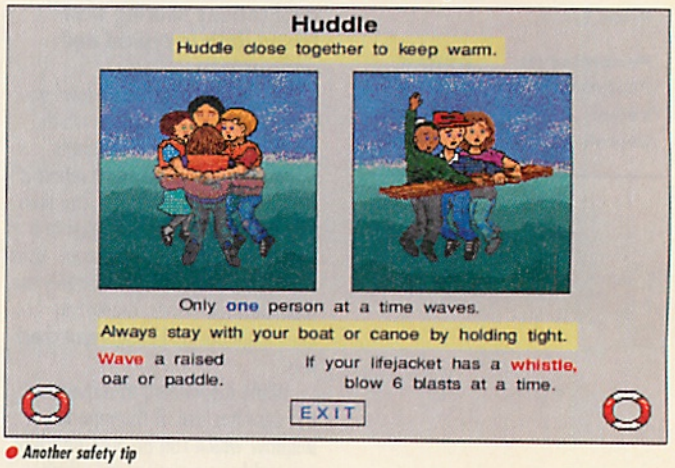
Before you load anything you have to make sure that your computer is correctly configured. This involves selecting Mode 15, switching off the Arm 3 cache if you have one, increasing the font cache to 128k, setting the font anti-aliasing and cached bitmaps to 24 points and 48 points respectively as well as turning up the sound volume to maximum. This all strikes me as being a bit much.




● *Swimming is perhaps best used to teach children water safety*

The process is easier with RISC OS3 because !Configure is easily accessible. If you have RISC OS2, it's a complete bind. There are detailed instructions contained on a ReadMe file on disk one which are supposed to explain everything in terms that children will understand, although they don't make up for the fact that this aspect of the program's operation should have been more carefully thought through in the first place.

● *Watch this glide..*

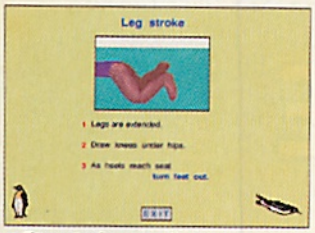



● *Another safety tip*

In order for Swimming to run, you first need to load the Genesis !Browser on disk one and then double click on the Index application. This consists of a screen of basic instructions as well as a contents page listing all the different activities, any of which can be loaded by double clicking on the appropriate icon. For the complete beginner there are a couple of questions with yes/no answers that help to establish the stage you need to go through first. The Front Crawl and Glide are covered over three modules, the Butterfly, Breast and Back strokes in another three, leaving one module each for water safety and survival. There's also an Activities stage that illustrates some of the scientific principles used in swimming.

Each stage comprises a series of screens that feature text and pictures accompanied by occasional sampled explanations. Sometimes the language used is rather technical and because the application is designed so that it can be used independently by children

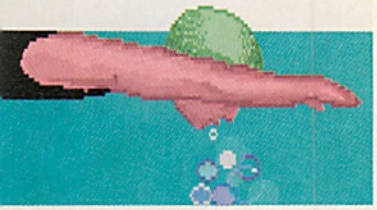
● *Another glide*




● *This section focusses on leg movements*

aged from six to twelve, this may cause a few problems. A passage in the Breast stroke section serves as a good illustration:

'As you press out, your head begins to clear the water. Breathe in as your hands start their inward squeeze. Head lowers as you stretch



and blow into the glide.' In any application there is always the danger that specialist knowledge on the part of the program designers doesn't always translate into something understandable to the average user. CD Sports need to be more careful.

Animated sequences illustrate each individual action. The image quality is reasonable and shading is used to good effect, although some movements are clearer than others. Some screens feature Cloze type activities where you have to drag the correct words to complete a sentence or put a sequence of actions into the proper order. Individual pages can be printed out, provided that a printer driver has been loaded.

The User's guide needs to be rewritten. It seems to have been produced by someone who doesn't know how to use a word processor because there's little in the way of consistency of either style or design. Some of the explanations are rather crude. At one point you read that there is a facility that allows children to produce their own diaries and reports, although you are then told to 'See your computer manual for how to proceed.'

## Diving in head first

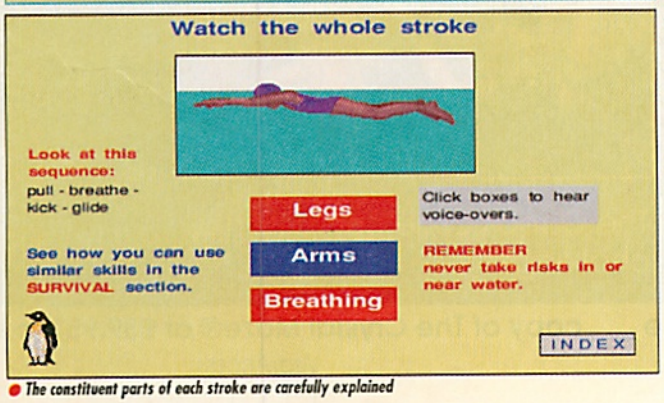
According to the developers, Swimming was extensively trialed in different schools around the country. I'm not sure that it is best used in the classroom - quite honestly I can't see the point of anyone, let alone children, studying the finer elements of the front crawl five miles away from the nearest stretch of water. Having said this, an A5000 isn't exactly the most sensible object to have at the poolside.

At the very least, Swimming should be put on CD ROM. This would allow Full Motion Video clips and better quality speech to be used. This is only a partial solution - really, the whole package needs to be released on CD, simply because it's easier to adapt and use such equipment in damp conditions. The application would then become a valuable teaching tool for both inexperienced and professional instructors.

Unless you are very keen and have enough room for eight disks in your disk box, you are better off waiting until Swimming matures into a more usable application. It has its place in the future, but that time is some way off yet.

**ALAN BENNETT** ●

As you press out, your head begins to clear the water. Breathe in as your hands start their inward squeeze. Head lowers as you stretch and blow into the glide.




● *The constituent parts of each stroke are carefully explained*

AUTOMATION

# Mailman

**Supplier**: Dean Sivell, 24 Birchwood Avenue, Beckenham, Kent, BR3 3PZ.
**Price**: £5.95
**Last Words**: Site licence available

| | |
|---|---|
| **Performance:** | ●●●●○ |
| **Features:** | ●●●○○ |
| **Value:** | ●●●●○ |
| **Overall:** | ●●●●○ |

**Last Words**: Stylish interface, competent label printer, ordinary database. Import feature would make it much more useful. Fair price.

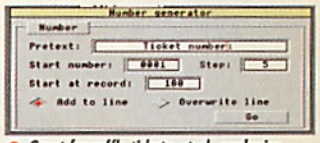
**Label printing is a basic requirement for database style applications and most have such facilities. MailMan, a new package from a small software producer, doesn't add anything to the features you can find in the top notch database programs, indeed it could almost be the mailing module of a more sophisticated database application. If you wish to build a simple mailing list and want to print impressive labels then it has much to offer: it's quick, stylish and handles printing very well.**

It could go further towards interactive label design but I was quite happy to be able to drop Draw format clip art onto the icon bar and to have it appear in my labels. Any outline fonts on the system are available and the record information - name, address, etc., - can be placed wherever best suits your graphic.

The records in the address database (it couldn't be used for anything else) can be searched, sorted, selected and, of course, printed onto labels. There's a number generation facility so that a sequence of labels can carry a sequence of different numbers. In this department, Mailman is competing with Dixon & Dixon's Flyprint, providing Draw graphics and RISC OS printing against Flyprint's faster but text only operation.

The menus and dialogue boxes are generally well-designed but I've got to quibble that the mouse Adjust button doesn't act as it should, by leaving a menu on screen when an option has been chosen, making use more difficult than it need be.

The best part for me is Mailman's simple setup - Continuous, A4 and Disk label buttons - and the corresponding page preview. The designs are for the most common office stationary and fitted first time on my printer; a first in itself. For non-standard printing, the

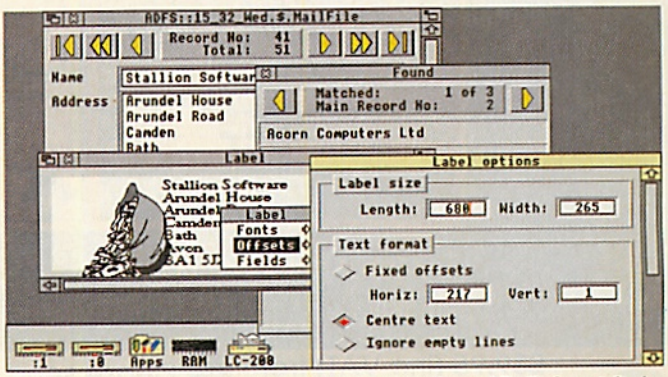



● *Great for raffle tickets, stock numbering, etc., the number generator is implemented well and is easy to set up in the RISC OS fashion*

page can be defined, DTP style, from a dialogue box. The text can be automatically centred on the label and the graphic scales itself cleverly to the size of label chosen. The graphic can also have its position defined. You can turn on a box around the label and these can be printed alone to act as a template for printing on paper and matching against label sheets.

The database is saved to disk in its own format and can be exported as comma separated values but there's no import feature, a major restriction since I foresee people wanting to use the advanced label printing features with their not so advanced databases. Mailman comes with example files and reasonable documentation as a text file on disk.

**MARK WEBB** ●




● *Mailman makes nice use of windows. The main window is onto the record file. The format is fixed, movement around records is carried out through the now common video-style control icons. A search has produced the Found window, Show label gives the on-screen preview based on the current record (note: not the found record). Label options controls the individual label's appearance*

The Crystal Maze is a Chatsworth Television production for Channel 4 based on ideas by Jacques Antoine © 1990

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*Acorn Computing October 1993*

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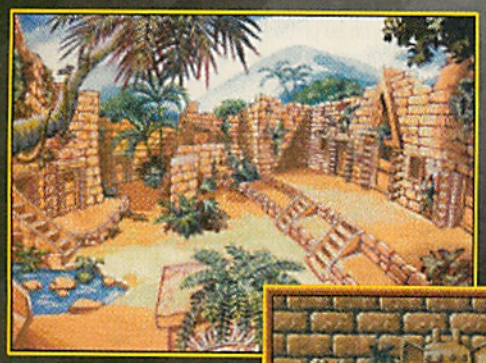

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# Readers Survey

## Dear Reader,

With your help last year, we managed to create a hugely popular magazine by listening to our readers' comments. Archimedes World was confirmed to be the only Acorn newsstand magazine with a growing circulation according the ABC figures published during the first two months of 1993. My aim is to continue to produce a magazine that you want to read, and so, once again, I am asking you to complete another readers' survey. Please take a little time to consider your answers and post the completed survey back to us in good time so that we may evaluate your requirements. Postage will not cost you a penny. In return, we will reward you with the best Acorn magazine that money can buy.

Andrew Banner
**Editor**

**1 Please indicate what you think of the following aspects of Archimedes World**

| | *Poor* | *Average* | *Good* | *Excellent* |
|---|---|---|---|---|
| News | ❒ 001 | ❒ 002 | ☑ 003 | ❒ 004 |
| Beginners | ❒ 005 | ❒ 006 | ☑ 007 | ❒ 008 |
| Comparative feature reviews | ❒ 009 | ❒ 010 | ☑ 011 | ❒ 012 |
| Technical Help | ❒ 013 | ❒ 014 | ❒ 015 | ☑ 016 |
| Cover Disk | ❒ 017 | ☑ 018 | ❒ 019 | ❒ 020 |
| Programming | ❒ 021 | ☑ 022 | ❒ 023 | ❒ 024 |
| Games coverage | ❒ 025 | ☑ 026 | ❒ 027 | ❒ 028 |

**2 Would you like to see more, less or around the same amount of specific articles in Archimedes World?**

| | *Less* | *The same* | *More* |
|---|---|---|---|
| General News | ❒ 029 | ☑ 030 | ❒ 031 |
| Readers letters | ❒ 032 | ☑ 033 | ❒ 034 |
| Technical help | ❒ 035 | ☑ 036 | ❒ 037 |
| Cover disk instructions | ❒ 038 | ☑ 039 | ❒ 040 |
| Club news | ☑ 041 | ❒ 042 | ❒ 043 |
| Public Domain | ❒ 044 | ☑ 045 | ❒ 046 |
| Communications | ☑ 047 | ❒ 048 | ❒ 049 |
| Beginners | ❒ 050 | ☑ 051 | ❒ 053 |
| Programming | ❒ 054 | ☑ 055 | ❒ 056 |
| Games reviews | ☑ 057 | ❒ 058 | ❒ 059 |
| Games hints | ☑ 060 | ❒ 061 | ❒ 062 |
| Games news | ❒ 063 | ☑ 064 | ❒ 065 |
| Education news | ❒ 066 | ☑ 067 | ❒ 068 |
| Education features | ❒ 069 | ☑ 070 | ❒ 071 |
| Education reviews | ❒ 072 | ☑ 073 | ❒ 074 |
| General product reviews | ❒ 075 | ☑ 076 | ❒ 077 |
| Comparative reviews | ❒ 078 | ❒ 079 | ☑ 080 |
| Competitions | ❒ 081 | ☑ 082 | ❒ 083 |
| General computing | ❒ 084 | ☑ 085 | ❒ 086 |
| Music | ❒ 087 | ☑ 088 | ❒ 089 |
| Graphics | ❒ 090 | ☑ 091 | ❒ 092 |

**3 Please indicate which of the following equipment you use at home and at work:**

| | *At home* | *At Work* |
|---|---|---|
| A3000 | ❒ 093 | ☑ 094 |
| A310 | ❒ 095 | ❒ 096 |
| A410 | ☑ 097 | ❒ 098 |
| A440 | ❒ 099 | ❒ 100 |
| A540 | ❒ 101 | ❒ 102 |
| A5000 | ❒ 103 | ❒ 104 |
| A3010 | ❒ 105 | ❒ 106 |
| A3020 | ❒ 107 | ☑ 108 |
| A4000 | ❒ 109 | ☑ 110 |
| A5000 NS | ❒ 111 | ☑ 112 |
| A5000 ES | ❒ 113 | ❒ 114 |
| Pocket Book | ❒ 115 | ❒ 116 |
| A4 | ❒ 117 | ❒ 118 |
| R140 | ❒ 119 | ❒ 120 |
| R260 | ❒ 121 | ❒ 122 |
| IBM PC compatible | ❒ 123 | ❒ 124 |

Other (please state) ❒ 125

.....

.....

.....

.....

**4 Do you own any of the following?**

| | |
|---|---|
| Dot Matrix printer | ❒ 126 |
| Laser Printer | ☑ 127 |
| Multisync monitor | ❒ 128 |
| VGA Monitor | ❒ 129 |
| Standard monitor | ❒ 130 |
| Television monitor | ❒ 131 |
| Hand held scanner | ❒ 132 |
| Flatbed scanner | ❒ 133 |
| Colour scanner | ❒ 134 |
| Trackball | ❒ 135 |

**5 Do you use a PC emulator with your Archimedes?**

Yes ❒ 136 No ☑ 137

*If Yes, what for?*

.....

.....

.....

.....

**Would you like to see reviews of PC products running under PC emulation?**

Yes ☑ 138 No ❒ 139

**6 Do you buy any of the following magazines?**

| | *Never* | *Occasionally* | *Regularly* |
|---|---|---|---|
| BBC Acorn User | ❒ 140 | ❒ 141 | ☑ 143 |
| Acorn Computing | ❒ 144 | ❒ 145 | ☑ 146 |
| RISC User | ❒ 147 | ❒ 148 | ☑ 149 |
| Archive | ❒ 150 | ❒ 151 | ❒ 152 |
| Early Times | ❒ 153 | ❒ 154 | ❒ 155 |
| Times Educational Supplement | ❒ 156 | ❒ 157 | ☑ 158 |

**7 Please indicate what you think of the following magazines compared to AW**

| | *Worse* | *Good as* | *Better than* |
|---|---|---|---|
| BBC Acorn User | ❒ 159 | ☑ 160 | ❒ 161 |
| Acorn Computing | ❒ 162 | ☑ 163 | ❒ 164 |
| RISC User | ❒ 165 | ☑ 166 | ❒ 167 |
| Archive | ❒ 168 | ❒ 169 | ❒ 170 |

**8 Are you a new Archimedes user?**

Yes ❒ 171 No ☑ 172

**Are you new to computers in general?**

Yes ❒ 173 No ☑ 174

**If you are a new Archimedes user, do you find the cover disk easy to use?**

Yes ❒ 175 No ❒ 176

**Can you suggest one way which the cover disk can be improved.**

.....

**9 How long do you spend reading your copy of Archimedes World?**

| | |
|---|---|
| Over 2 Hours | ❒ 177 |
| 1-2 Hours | ☑ 178 |
| ½ -1 Hour | ❒ 179 |
| Less than ½ hour | ❒ 180 |

**10 How many other people read your copy of Archimedes World?**

| | |
|---|---|
| None | ☑ 181 |
| 1-2 | ❒ 182 |
| 3-5 | ❒ 183 |
| More than 5 | ❒ 184 |

**11 If your copy of Archimedes World is read by other people, please give details of their age and sex.**

| | *Person 1* | *Person 2* | *Person 3* |
|---|---|---|---|
| **Age:** | | | |
| 5-8 Years | ❒ 185 | ❒ 186 | ❒ 187 |
| 9-14 Years | ❒ 188 | ❒ 189 | ❒ 190 |
| 15-24 Years | ❒ 191 | ❒ 192 | ❒ 193 |
| 25-34 Years | ❒ 194 | ❒ 195 | ❒ 196 |
| 35-44 Years | ❒ 197 | ❒ 198 | ❒ 199 |
| 45-54 Years | ❒ 200 | ❒ 201 | ❒ 202 |
| 55-64 Years | ❒ 203 | ❒ 204 | ❒ 205 |
| Over 65 Years | ❒ 206 | ❒ 207 | ❒ 208 |
| **Sex:** | | | |
| Male | ❒ 209 | ❒ 210 | ❒ 211 |
| Female | ❒ 212 | ❒ 213 | ❒ 214 |

**12 How long do you keep your copies of Archimedes World?**

| | |
|---|---|
| Less than one month | ❒ 215 |
| One Month | ❒ 216 |
| Three Months | ❒ 217 |
| Six months | ❒ 218 |
| A year or more | ☑ 219 |

**12 If kept, how often do you refer back to copies of Archimedes World?**

| | |
|---|---|
| Once a week or more | ❒ 220 |
| Once a month | ☑ 221 |
| Once every three months | ❒ 222 |
| Less often | ❒ 223 |
| Never | ❒ 224 |

**13 How long have you been a reader of Archimedes World?**

| | |
|---|---|
| Less than three months | ❒ 225 |
| 3-6 months | ❒ 226 |
| 7-12 months | ❒ 227 |
| 12-18 months | ❒ 228 |
| Since the days of A&b Computing | ☑ 229 |

**14 How often do you buy Archimedes World?**

| | |
|---|---|
| Occasional issues | ❒ 230 |
| Most issues | ❒ 231 |
| Every issue | ☑ 232 |

**15 How do you obtain your copy of Archimedes World?**

| | |
|---|---|
| Subscription | ❒ 233 |
| Local Newsagent | ❒ 234 |
| National Newsagent | ☑ 235 |
| Passed on copy | ❒ 236 |

**16 Are you aware of the scheduled publication date of Archimedes World?**

Yes ❒ 237 No ☑ 238

**17 If Yes, do you attempt to buy Archimedes World on that date?**

Yes ❒ 239 No ❒ 240

**18 If you are a subscriber, on which date did you receive this issue?**

❒❒ / ❒❒ / ❒❒

**19 If you are a subscriber, how long have you subscribed to this magazine?**

| | |
|---|---|
| 1-6 months | ❒ 241 |
| 7-12 months | ❒ 242 |
| 1-2 years | ❒ 243 |
| 2-3 years | ❒ 244 |
| 3 or more years (as A&B computing) | ❒ 245 |

**20 If you do not obtain Archimedes World by subscription, is it due to one of the following?**

| | |
|---|---|
| Subscription too expensive | ❒ 246 |
| Not every issue required | ☑ 247 |
| Unaware of subscription service | ❒ 248 |

**21 Did you know that taking a subscription and having Archimedes World delivered to your door costs no more than buying each issue from your newsagent (UK only)?**

Yes ❒ 249 No ☑ 250

**22 Would you like to receive further details on taking a subscription to Archimedes World?**

Yes ❒ 251 No ☑ 252

**23 Please tick any hobbies or interests which you may have, besides computing:**

| | |
|---|---|
| Model Railways | ❒ 253 |
| Model Boats | ❒ 254 |
| Model Cars | ❒ 255 |
| Model Engineering | ❒ 256 |
| Model Aircraft | ❒ 257 |
| Steam Locomotives | ❒ 258 |
| Radio/CB | ❒ 259 |
| Cooking | ❒ 260 |
| Woodworking | ❒ 261 |
| Crafts | ❒ 262 |

Others: MUSIC

**24 Please tick the box which represents the annual total of your gross income.**

| | |
|---|---|
| Under £6,500 | ❒ 263 |
| £6,501 - £8,000 | ❒ 264 |
| £8,001 - £10,000 | ❒ 265 |
| £10,001 - £12,500 | ❒ 266 |
| £12,501 - £15,000 | ❒ 267 |
| £15,001 - £19,000 | ❒ 268 |
| £19,001 - £25,000 | ☑ 269 |
| Over £25,000 | ❒ 270 |

**25 What is your age?**

| | |
|---|---|
| Under 15 yrs | ❒ 271 |
| 15-18 yrs | ❒ 272 |
| 19-21 yrs | ❒ 273 |
| 22-24 yrs | ❒ 274 |
| 25-34 yrs | ❒ 275 |
| 35-44 yrs | ☑ 276 |
| 45-54 yrs | ❒ 277 |
| 55-64 yrs | ❒ 278 |
| Over 64 yrs | ❒ 279 |

**26 Which of the following newspapers do you read?**

| | |
|---|---|
| The Times | ❒ 280 |
| The Daily Telegraph | ❒ 281 |
| The Financial Times | ❒ 282 |
| The Guardian | ☑ 283 |
| The Independent | ❒ 284 |
| The Daily Express | ❒ 285 |
| The Daily Mail | ❒ 286 |
| The Daily Mirror | ☑ 287 |
| The Sun | ❒ 288 |
| Today | ❒ 289 |
| None of the above | ❒ 280 |

**27 Which of the following Sunday newspapers do you read?**

| | |
|---|---|
| The Sunday Times | ☑ 291 |
| The Sunday Telegraph | ❒ 292 |
| The Sunday Express | ❒ 293 |
| The Observer | ❒ 294 |
| The Mail on Sunday | ❒ 295 |
| The Sunday Mirror | ☑ 296 |
| The People | ❒ 297 |
| The News of the World | ❒ 298 |
| News on Sunday | ❒ 299 |
| The Independent on Sunday | ❒ 300 |
| None of the above | ❒ 301 |

**28 What is your marital status?**

| | |
|---|---|
| Married | ❒ 302 |
| Single | ☑ 303 |
| Divorced | ❒ 304 |

**29 Your Gender?**

Male ☑ 305
Female ❒ 306

**30 Are you:**

In full time employment ☑ 307
In part time employment ❒ 308
Unemployed ❒ 309
Retired ❒ 310
Student (full time) ❒ 311
Student (part time) ❒ 312

**31 Please state your occupation/profession**

TEACHER.

**32 If you are a student, what subjects are you studying?**

**Name**

**Address**

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A

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C A

# Prime Series

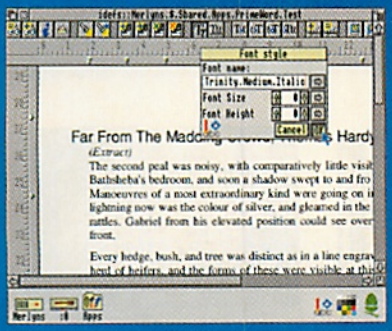
The No.1 in Software

*"The range of software with configurable button bars making it suitable for children or adults, for leisure, education or professional use"*

## PrimeArt

**£79.95 + VAT**

A 256 colour art package with menus which can be tailored to suit a wide range of ages and abilities. Sprites can be imported and saved in a viewing window and can be used to paint and draw, produce stunning tiling effects, be placed anywhere on screen and even rotated and resized. Pictures can be printed in several formats including over four pages to produce a poster.




## PrimeWord

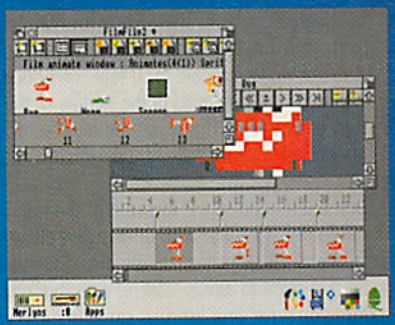
**£59.95 + VAT**

A multi-tasking WYSIWYG wordprocessor which allows use of outline fonts and imports graphics in the form of sprites or draw files. With multiple documents, word list feature and spelling checker it is ideal for home, business or educational use. Documents can be printed in three sizes including over four pages to produce posters.

## PrimeMover

**£79.95 + VAT**

Create your own animated films with this easy to use animation package. Sprites can be animated and moved about on the screen in a highly controlled manner, using a very simple user interface. Sophisticated real time control animations may be created using only the mouse in a simple, intuitive way.



## PrimeSolver

**£79.95 + VAT**

A totally interactive, fun, problem solving program for all ages. PrimeSolver is ideal for individual or group use stimulating decision making and discussion in the classroom or home. Solve the problems by creating fun apparatus with the objects and items supplied.

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MINERVA SOFTWARE

MINERVA HOUSE, BARING CRESCENT, EXETER, EX1 1TL
Tel. (0392) 437756 Fax. (0392) 421762

# Wonder Words

*Alan Bennett investigates a two new packages to aid vocabularly learning in infants*

**A child's sight vocabulary develops over a long period of time. In the early infant years, a child first learns to read and write the most frequently used words. Gradually, a more complex vocabulary is introduced. There are a number of ways in which teachers tackle this aspect of language development but one common approach is to familiarise children with words associated with the current class topic. For example, if they were studying farms, the children would get to learn and use words such as stable, tractor and plough.**

In many Primary schools children keep their own word books which they can refer to when producing a piece of writing. These can contain words given by the teacher as well as those that the child has found for themselves.

Up to now, such lists have been consigned to pocket notebooks which often end up in tatters. This is, however, a task to which computers are ideally suited, because of their ability to both store and easily access large amounts of data. Word Library from Kudlian Soft and Word Bank from Topologika are two new word book applications that can be used either on their own, or alongside a word processor. The Word Library package also includes Pictogram, a simple graphing package.

## Word Bank - Topologika

Word Bank comes on a single disk accompanied by a small manual. There are two separate program, Word Bank, the full application which uses about 220k of Ram and Tiny Word Bank, a cut down version which uses 64k. Both load straight to the Icon bar.

If you click on the Word bank application icon you are presented with a window. Initially this doesn't contain any words, but by using the Load option from the Main menu, you can import any one of the example lists that come on the programme disk. These cater for both Infant and Junior age children, although there are also lists of simple German and French vocabulary and a collection of words suitable for a topic on Space.

The words are displayed in the middle of the window using the Trinity Medium outline font. This is not the most suitable typeface to use with children - a font designed specifically for education such as Jotter, would have been better.

On the left hand side is a record of the number of words and meanings in the current list, together with arrows that allow you to move through the words. Alphabetical characters are also displayed and by clicking on them you can quickly scroll to words starting with that particular letter.

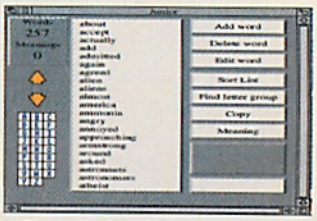
Once you have your list, you can add more words, sort it or search for particular letter groups. By clicking Select you can highlight a word, by using Adjust you can apply the effect to successive items.

Once a word is selected it can be edited, deleted or if you have a word processor or DTP program loaded, copied to the current cursor position. Some of the items in the list may have a blue dot next to them indicating that there is a definition attached. If you click on the Meaning button, this will appear in a separate window.

Two or more lists can be merged, although if you wish you can create your own. The Save sub menu allows you to consign to disk either a selection of highlighted words or the complete list and its meanings. The Print sub menu has a similar set of options. Files are saved in ASCII format and have words and their definitions written on consecutive lines.

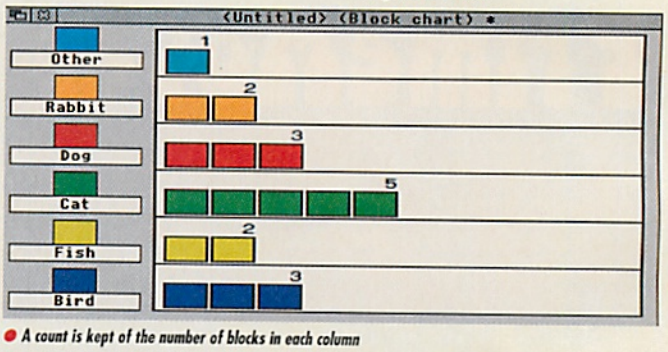
On the Icon bar menu is a password protected configuration dialogue box. This allows you to switch off any of the buttons or main menu items as well as giving you the ability to amend a word's meaning.

Tiny Word Bank is much simpler. Although it displays the same lists, you can only copy individual words into a document. The manual is quite well written although a little long winded, while there's also an A5 sheet with a number of classroom ideas.

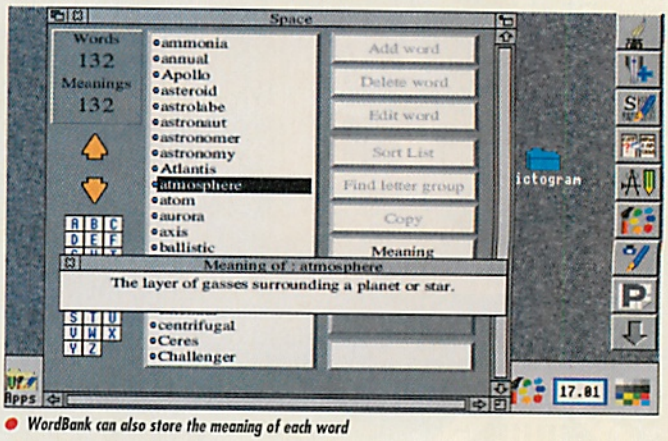



● *The word bank window*

● *Most of Word Bank's facilities can be configured on or off...*




● *A count is kept of the number of blocks in each column*




● *WordBank can also store the meaning of each word*

# Word Library - Kudlian Soft

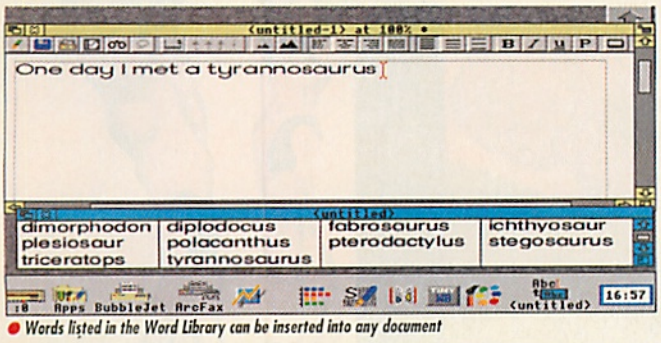
Word Library is a more straightforward application than the equivalent offering from Topologika. Its main task is to display a list of words in alphabetical order in a window. If you have a word processor or DTP package loaded, you can insert a word into a document by clicking on it with Select.

The application only uses 64k and comes with a number of libraries already on disk. Some of these are in the form of Word Library applications. When run, these will start the Word Library program and load the list of words. Alternatively, you can drop an ASCII file onto the application icon. Such lists can be created using Edit, although you need to make sure that each word is on a separate line.

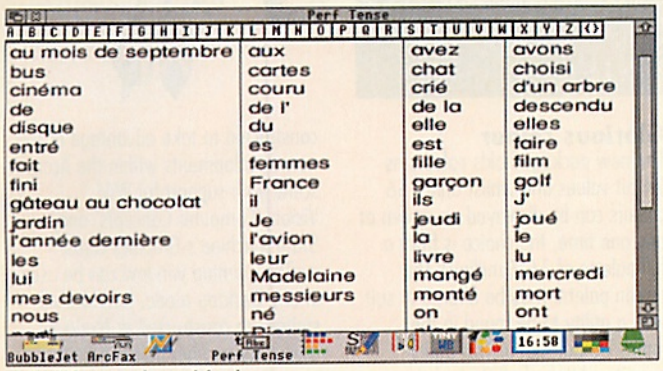
Main menu options give you the choice of displaying words in either the system or Jotter fonts and the facility to change the colour of the title bar. As with Word Bank, you can click on a letter to move the list to the relevant part of the alphabet. Lists can be merged and then re-saved.

Word Library can also work with a remote switch connected to the user port, making it suitable for use by those who have difficulty in using a conventional keyboard. By using the Options dialogue box you can configure the rate that the programme scans over each letter or word. By activating the switch you can make a selection.

Most of Word Library's functions are clearly explained in the manual that it shares with Pictogram.




● *Words listed in the Word Library can be inserted into any document*



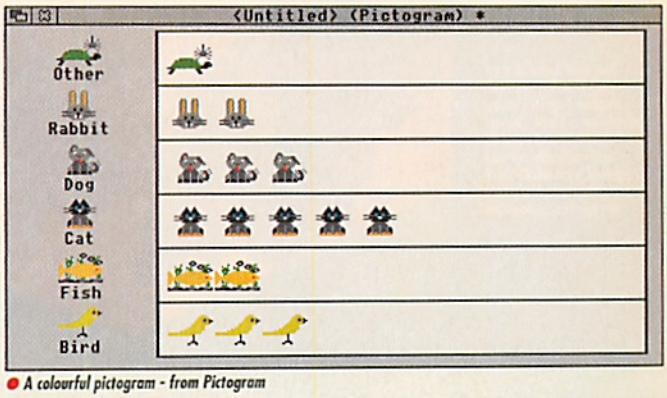

● *Word Library can also speak french*

# Pictogram

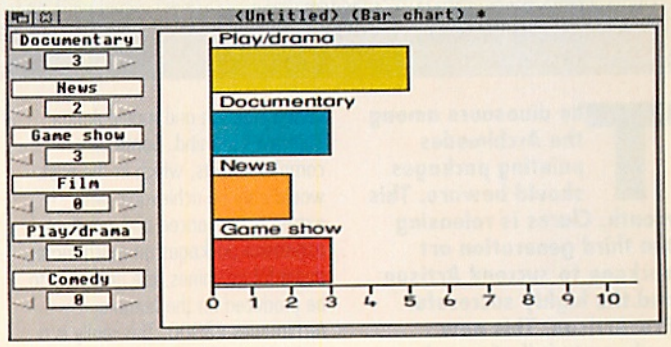
Pictogram is a neat, but simple multi-tasking graphing package. It's designed to help children create pictograms, block charts and bar charts. It comes with ten different picture sets covering topics such as pets, the family, traffic and TV programmes, any of which can be selected from the Main menu.

The manual doesn't mention whether you can create your own picture sets although teachers with expert knowledge of Paint shouldn't have too much of a problem.

When the application is in pictogram mode, the miniature pictures in each set are displayed at the side of the screen from where they can be easily dragged into place on the graph. To correct any errors you just haul the image back out again. Block charts are created in a similar fashion, whereas to make a bar chart, you simply click on arrows to increase or decrease the size of each bar. In both of these modes, labels relevant to the currently selected data file are displayed. Both the data and the graph can be saved to disk - the latter as a Draw file. The graph can also be printed out provided a suitable printer driver is loaded.The manual is excellent. There's a section that explains how a child's understanding of data handling develops, as well as a number of suggested activities suitable for each data file. There are of course the usual references to the National Curriculum.




● *A colourful pictogram - from Pictogram*




● *Pictogram can produce simple bar charts*

# Conclusion

If you have Pen Down, you will already have a word list application. It may not be as sophisticated as Word Bank, but it does the job.

Of the two word list applications reviewed here, Word Bank has the best range of features - I particularly liked the ability to record definitions. In this sense it really is a computerised word book. If this is what you want, then you should get it.

Many teachers may feel that they don't need all that Word Bank has on offer, in which case Word Library may be more suitable. Having said this, perhaps the best reason to buy Word Library is that you also get Pictogram. This is an excellent programme that should be a boon to any teacher trying to introduce data handling to young children and of the three, is by far and away the most fun to use.

**ALAN BENNETT** ●

## FACTFILE

**Product**: Word Bank
**Supplier**: Topologika
PO Box 39, Stilton, Peterborough, PE7 3RL
Telephone 0733 244682
**Price**: £29.95 excl. VAT - includes a free site licence.

| | |
|---|---|
| **Performance:** | ●●●●○ |
| **Features:** | ●●●●○ |
| **Value:** | ●●●●○ |
| **Overall:** | ●●●●○ |

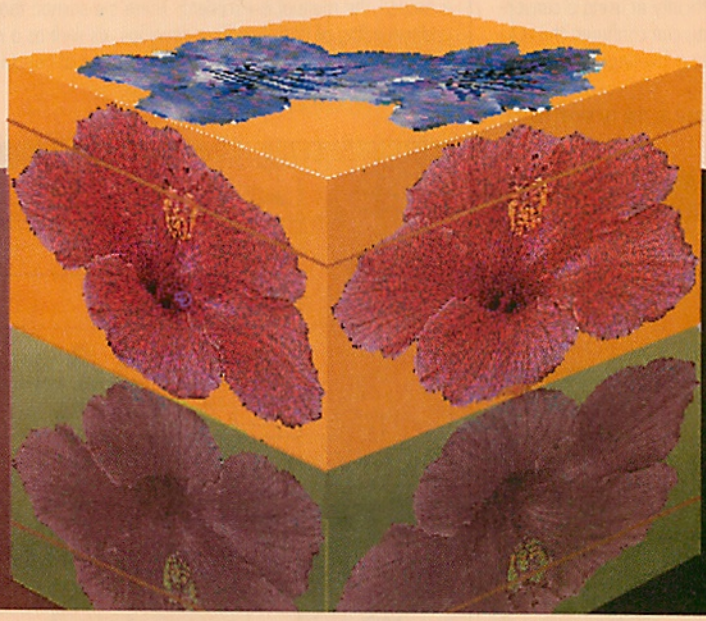
**Product**: Word Library/Pictogram
**Supplier**: Kudlian Soft
8 Barrow Road, Kenilworth, Warwickshire, CV8 1EH
Telephone 0926 851147
**Price**: £20 excl. VAT - includes a free site licence.

| | |
|---|---|
| **Performance:** | ●●●●○ |
| **Features:** | ●●●●○ |
| **Value:** | ●●●●● |
| **Overall:** | ●●●●○ |

Dino was constructed using a combination of lines, solid fills, brush and spray at varying opacities, smear and smudge with differing brush sizes. Various small items were cut flipped and then pasted back into the new position. Smear and smudge enabled an invisible join to be made. Weasel and fern were constructed on a separate canvas, cut using rectangular cutting tool and then placed in position on Dino canvas

# Art Surgery

## *Pro Artisan 2 proves that you don't need a PC to become a Constable*



Box was hand drawn and shading applied. Grabbed sprites were placed on a blank canvas and Magic Wand used to automatically cut out required portion. Distort was then used to place the sprites in position

**The dinosaurs among the Archimedes painting packages should beware. This month, Clares is releasing the third generation art package to succeed Artisan and the highly successful Pro-Artisan. This new package is full of novel ideas for image production and manipulation. Unlike its predecessors, the new Pro-Artisan 2 is fully RISC OS compliant, which immediately gives it much more flexibility. Together with the plethora of tools and manipulation facilities, this innovative program threatens the majority of other painting packages designed for the Archimedes with extinction.**

The huge range of tools and facilities make it much more advanced than other packages with similar image creation and manipulation objectives in mind. Some very complex effects, which in the past would only be achievable with extremely advanced and inordinately expensive packages on much more powerful machines, are now able to be produced on the humble Archimedes A3000. This really is a highly sophisticated piece of software.

The minimum requirements for using the new package are an Archimedes machine fitted with RISC OS, 2Mb of RAM and preferably a multiscan monitor. The latter is not an absolute requirement as the images produced can be seen very well using a standard resolution monitor in mode 15, but will be required if you want access to the higher resolution modes. Of course RISC OS3 produces a better working environment, but those of us who have not yet upgraded from earlier versions of RISC OS will still be able to use the package.

### Glorious colour

The new package holds colours as 24 bit values and whilst only 256 colours can be displayed on screen at any one time, the choice is from a full palette of 16.7 million! The screen palette may be altered to suit with a utility to be found in the Input/Output menu. This utility permits editing of all 256 of the available colours. Blends with up to 256 steps can be created by dragging from the top right hand corner of the Edit Palette colour display and then clicking on the blend arrows at the top right hand corner of the Edit Palette. These need not just be greys, but any hue. If the full 256 step blend is not required, dragging over a range, say from yellow to blue, will produce a blend from the start colour to the end colour. The only draw back is that if you want to see all the chosen colours, or blends, displayed on screen, a colour card together with a multiscan monitor is required. Pro-Artisan has been constructed to take advantage of the new developments within the Acorn scene with support for Wild Vision/Computer Concepts' and State Machine's Graphics cards.

The painting window can be used in any Desktop mode, however all sprites are constructed in Mode 21. Unlike some other painting and image manipulation packages, such as Revelation Image-Pro, changing modes during the construction of an image does not change the mode in which the image is being constructed, so there is no loss of resolution or colour distortion. The Save As option permits conversion to other modes prior to saving and it is only at this stage that any conversion of the image to other modes is carried out. Mode 21 and other high definition sprite files may take up vast amounts of storage space and so, included in the save option is a compression facility. This particular compression takes advantage of the Squash utility procedures, which may

be found on the RISC OS3 applications disk. Compressed files from the previous package are incompatible with this particular compression technique and will need decompression using one of the utilities for this purpose, or by loading the compressed file into Pro-Artisan (version one) and saving as a plain sprite.

Once Pro-Artisan 2 is installed on the Icon bar, a create window may be opened by clicking on the icon with select. This window gives several preset size options which may be scrolled through until the desired size is found, or a custom size may be created by adjusting the width and height parameters in the appropriate box. For those of us who are not completely familiar with pixel sizes, the option to set the window size in inches or centimetres is provided. The only limitation on the size of the window is that imposed by memory.

Sprite files containing single images which are less than 100 pixels by 100 pixels will not be accepted for display as a screen. They can however be incorporated into the picture by dropping them into the Sprite pool. The icon bar menu contains the usual Info item with details of the author and the program function. Other items include Show (which lists all images currently loaded into Pro-Artisan 2), Create, Remove (whereby selected canvasses may be removed from memory), Remove all (removes all!), Minimise (removes undo facility, releasing memory where memory is tight), and Quit. If Minimise is used, some of the Effects and Filters will not work and certain other items, such as texture, work in a slightly different way. This is noted in the handbook which also includes the advice that Minimise should not be used except when absolutely necessary, such as when memory is extremely tight.

## Suit yourself

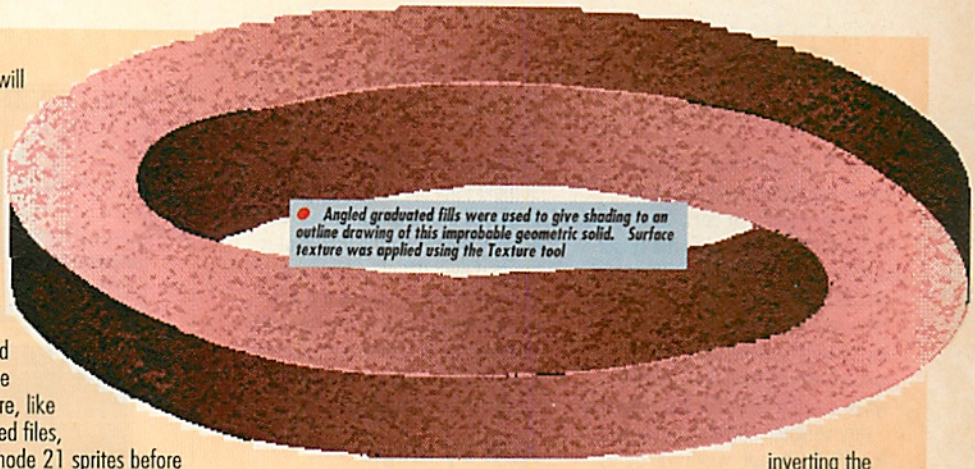
A configuration utility, !Options, is provided on the main application disk, which allows the package to be configured to the user requirements. Double click on the options icon and an expandable window opens to permit the disabling of menu items. Disabling the items will not result in the program occupying less space in memory, but will stop you wasting time fiddling around with the many options, if you really want to.

Draw files can be dropped directly into the window and are, like other recognised files, converted to mode 21 sprites before displaying - a great improvement over the preceding programs which did not recognise Draw format.

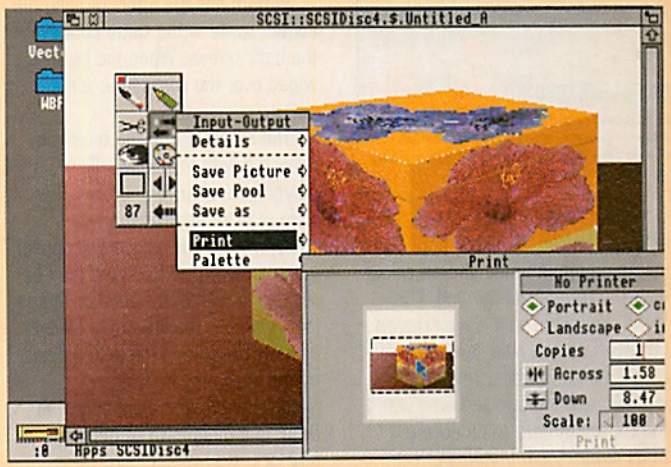
Attached to the main working window is a small toolbox, or as it is more correctly known, Tool pane, reminiscent of that carried by Artworks. The tool icons are all familiar with the exception of Frisket, Process and Input Output.

Input/output has a number of menu items, the first of which, Details, gives an indication of the colours on the canvas and displays a histogram of the frequency those colours have been used. The next two items are options for saving the canvas and sprite pool, either as normal sprites or in squashed format with a further option to save the canvas in the screen mode of your choice. The print dialogue box shows a representation of the possible printing area, the details of which are taken from your printer driver. A nice touch is the ability to adjust the canvas position on the paper by dragging a small canvas around the paper representation. The controls visible to the right allow you to select between portrait and landscape, set the number of copies to be printed, position the image by use of x and y co-ordinates or to automatically centre the image vertically and horizontally.

The term Frisket is perhaps new to some painting package users, but it should be familiar to those who have experience in the printing trade and hand presses in particular. It is a metal frame which holds a thin sheet of parchment between the printing platen and the target paper to effectively exclude ink from selected areas, in other words, a masking device. However this frisket is much more than a mask - it is one of the more powerful tools in the application. With the Frisket, areas may be laid down as one would use masking tape to protect areas from paint and, when the Frisket is reversed, as a stencil. Only by experimentation with this facility can the full value of it be realised. Most of the tools and effects can be used with the frisket active either as laid on the screen or inversed. Filters and effects can be selectively applied to any area of the canvas by using a frisket, which makes their use really powerful. The frisket icon has three states - inactive, active and create. With the frisket inactive, the whole of the canvas is available to paint on. Select the active state and any frisket you have created comes into action, protecting parts of the screen you don't want your paint to reach. The process menu items include facilities for removing or inverting the frisket and altering the frisket colour (useful if you have already used a lot of the default frisket colour, red, in your picture). Two further items, Make Last and Add Last, further add to the versatility of the Frisket. The first of these menu items, Make Last, creates a Frisket from the last action carried out on the canvas, be it filling an area, using the brush, pencil, pen or spray tools. In fact, virtually any action carried out to modify your painting, with very few exceptions, can be made into a Frisket using this option. Add Last is similar to Make last except that the Frisket is added to any existing Frisket.



Angled graduated fills were used to give shading to an outline drawing of this improbable geometric solid. Surface texture was applied using the Texture tool




The print window permits adjustment of the canvas position on the paper

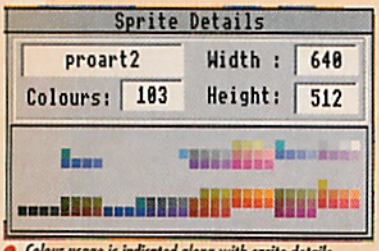
## Paint ball

Painting with Pro-Artisan 2 is a real pleasure. The range of painting tools is quite extensive. Brush and spray can be used with the current colour set to varying opacities form the screen palette. With the opacity set low, multiple passes over the area permit the colour to be built up to full intensity. Application of low opacity colours over other colours gives a sort of colour mixing effect. With the colour set to black, and the opacity to say 25%, existing colours on the canvas can be darkened discreetly to give realistic shading, whilst highlights can be given using a light

Drawn directly onto canvas. A single brown colour was used for the skin at low opacity (30%). Multiple passes enabled shading and detail to be applied. Highlights were added using white at 25% opacity

colour. The brush does not apply colour as a continuous line, but rather as a series of dots. This can be demonstrated by moving the cursor quickly across the canvas. The pencil, on the other hand produces a continuous line which I found very useful for creating outlines very quickly without the risk of colour leaking when doing a flood fill. The Inkpen is a very versatile drawing implement. As with the pencil, width can be set, but with this tool the pen starts off small and increases to the set width as it is dragged about the page. Varying the speed at which the tool is dragged varies the distance travelled before full width is reached. Great for drawing trees, leaves, grasses and calligraphy too.

Two tools, crayon and texture, use the same series of pre-set sprite




Colour usage is indicated along with sprite details. Clicking in the distribution window produces a histogram showing frequency of colours

patterns to create some superb effects. The crayon places the selected pattern in the chosen colour over the current background. This looks somewhat as if a wax crayon has been rubbed over canvas placed on a textured surface. Texture washes over the selected area with the chosen pattern to produce a three dimensional textured effect without disturbing the colours beneath. You can now see what your picture would look like if painted on canvas, rattan, concrete, pebbles or indeed any one of sixteen textures. The depth of the texture may be built up by successive passes of the brush.

The Special sub menu provides smudge, dopple, smear and diffuse options. My particular favourite is the smear tool. Using this is like using a finger to drag pastel colours into one another and provides a simple means of subtly blending images together. Smudge is somewhat similar in that it smudges colours as if smudging wet paint. Dopple produces a pointillist effect on the canvas. The two settings Clone and Sample produce differing effects. Clone will read the area beneath the brush and write it back with a differing pattern of dots. The effect can be quite dramatic. Sample uses the colours currently displayed in the colour picker. Diffuse actually breaks up the area that is brushed over. Used without the Clone or Sample options it is like using a small brush in the currently selected colour. Clone and Sample options follow the same rules as those for the Dopple tool.

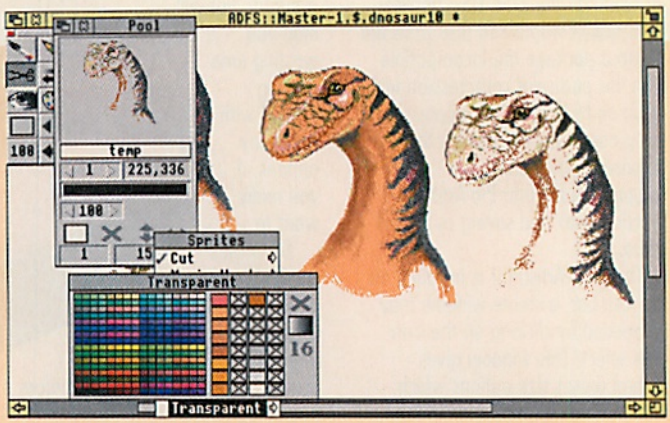
## As if by magic

There is, of course, the Magic brush which I found so useful in the original Pro-Artisan. For those who have not come across it, this tool allows you to selectively change up to sixteen colours for any other colours. After setting the colours to be changed a mere pass of the brush over the area to be edited and the colour change is carried out. Just like that! It's magic. The effect can be applied globally by using the Magic option from effects in the Process menu.

Pattern has the effect of tiling the current sprite in the sprite pool over the back screen. When the brush is wiped over the canvas the sprite pattern is revealed.

The range of drawing tools is as expected with rectangle, ellipse, polygon, line, curve and text. The style selector enables the way in which the various objects will appear when drawn. Line thickness may be set, along with butt, round or square joins of lines. The lines may be set open or closed and the area defined by the lines may be filled, filled/stroked or stroked only. The Draw tool menu also contains the grid lock. Grid colours may be changed and the grid size altered.

The sprite menu contains a number of new goodies including Magic Wand. This is a really splendid tool which automatically cuts out your selected sprite from its background. With a bit of practice, it is possible to merely click on an object to have it transferred to the sprite pool. Rectangular and irregular sprite cutting tools are also available as are the standard fill, paint, scale and rotate tools. The distort tool can produce some interesting effects as well as being very useful for perspective rendering of a sprite object. An additional tool, Sphere, does exactly that, it distorts the current sprite onto a sphere. Something extra is the Transparent tool and with this, colours may be set as transparent when they are included in a sprite.




Selected colours can be made transparent when cutting sprites. The colours to be transparent are place in columns 1 and 3. Collumns two and four cannot be altered

This is almost like setting a very complex mask as you can see from the example of the dinosaur head.

## Very spritely

The sprite pool is something more than just an image library. From here the sprite may be flipped left, right, up or down, sprites may be placed on the screen with full opacity or set to varying degrees of transparency using the slider provided. Sprites may be overlaid on other images with the background showing through. A series of 12 Auto blend options is provided giving almost all the possible ways in which to blend a sprite into the canvas.

The last thing to mention, but by no means the least, is the Process menu. This has a choice of powerful filters and effects which I consider to be first class. The filters include Inverse, which simply inverts the canvas colours; Tint, which will provide a tinted image in the current blend set; Lighten, which adds a percentage to the grey level values of the current pixels, while Darken does the opposite; Cut-off, the only filter to work in conjunction with a frisket, posterises the image to the two colours at either end of the current blend set; Contrast, which as the name implies alters the contrast of an image, and Anti-alias which we all know about. Remove dots does just that, great for cleaning up stray pixels say from the spray tool, while Colour shift permits the colour balance of an image to be altered and some amazing effects can be obtained. Grey shift comes with standard grey, posterisation, solarisation, mid range boost and invert - you will have to use these options to appreciate their action on an image.

In addition to a whole host of effects including sphere, sharpen, find edges, facet, halftone, magic, block, texture and pattern there is a generic option with which you can select from a number of pre-set filters, or design your own. My favourite effect is emboss. This gives an impression of a relief carved onto the canvas. A most useful tool is the Crop to Window option, with which the canvas is cut down to the current visible window size. Large and therefore memory hungry scanned images can be cropped to leave the area needed.

Pro-Artisan 2 is perhaps one of the most versatile painting packages that I have come across to-date. The tools provided permit sophisticated drawing techniques to take place directly on the screen, whilst the image manipulation facilities certainly give the majority of the opposition something to really think about. The price is set right and the ease of using the package is second to none. The profusion of facilities which are available with Pro-Artisan 2 gives the lie to those who have the temerity to put the Archimedes down as a professional graphics tool. Use Pro-Artisan 2 along with the top quality vector graphic and desk-top publication packages now available and Acorn, and yourself, certainly have got something to crow about!

**DON SLAVEN**

### FACTFILE

**Product**: Pro-Artisan 2
**Supplier**: Clares Micro Supplies
98 Middlewich Road, Northwich, Cheshire, CW9 7DA
**Price**: £135 (inc. VAT)

**Performance:** ●●●●●
**Features:** ●●●●●
**Value:** ●●●●●
**Overall:** ●●●●●

**Last Words**: Extremely powerful yet easy to use. The best yet.

# Prophet ACCOUNTS

**'Currently the leader of the pack because of its general ease of use, comprehensive nature and high RiscOS factor. A well thought out and well supported program. Recommended' - Arc World, July 1993.**

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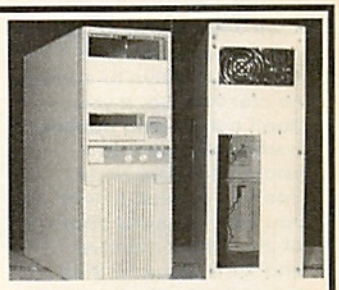

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# OUT OF THE DARC

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Greetings, and welcome to the column that lives by the old axiom, if at first you don't succeed... *cheat*. Alas, poor Ashley is no longer with us, something to do with having a load of letters surgically removed from his mouth. I offered to help, but when Ashley saw the chainsaw he ran rather fast, never to be seen again. I must admit that I wasn't too keen on giving the Ed. a pic of myself, not after having seen what he did to poor old Ashley, but then I thought if I have to suffer, so can you. So, if you don't mind being publicly humiliated, include a photo with your hints, tips and cheats. In fact you can send in a photo of any family member and we'll be more than happy to humiliate them for you, especially if you have a cute sister.

Well that's it for this month, keep sending in those tips, hints and cheats.

**ADRIAN PUMPHREY**

Send your tips, hints and cheats to,

**Out of the Darc,
Arc World,
Argus House,
Boundary Way,
Hemel Hempstead,
Hertfordshire.
HP2 7ST.**

## Iron Lord

**Thanks to the hard work of Matthew Bentham, I'm now assembling my armies and trampling across and all over the peasant population.**

### 1. The Archery Contest

From the castle go to the first town, the Archery Contest can be found on the NW edge. The Archery is very easy, you should have no problem winning, but if you get bored try shooting at the bush on the right of the screen.

### 2. Raising an Army

After the Archery Contest, assuming you have won, go to the Herbalist and give him the Cup. Then Discuss with him and he will raise an army. Now go to the second town. Go to the Innkeeper first and Discuss with him. Leave him and go to the Salesman, Discuss with him too.

Leave this town and go to the Windmill where you should Discuss with the Miller.

Now go to the Abbey. Here you will find the Monk, he is in the SE corner of the grounds, Discuss with him. It will transpire that he needs an antidote which can be gained from the Herbalist. Go to first village and visit the Herbalist.

Go back to the Abbey and give the Antidote to the Monk. Discuss with him again and he will agree to raise an army and sell his Wine to the Innkeeper.

From the Monk, go E and to the Chapel. Go inside and Discuss with the Templar. In very flowery speech he asks you to kill five assassins. Once you have been told that you are truly courageous return to the Chapel and Discuss with the Templar, he will now raise an army.

Go back to the second town and Discuss with the Innkeeper. He will now agree to pay the Miller and raise an army.

By this point in the game you will be regularly attacked by assassins and a few comments on swordplay may be appreciated. I find that the best way to do it, is to repeatedly stab upwards until your enemy falls, also try to parry any of his attacks that you can.

Go to the Miller and Discuss with him. He will agree to raise an army. Now go to the large town in the NE corner of the realm. Go into the Gaming House first. Try arm wrestling, which is very hard on the mouse and very easy using the Z and X keys. When you have finished-off about five opponents, the contest ends. You should now Discuss with the Waitress. She will give you a Pendant which you must give to the Mercenary directly to the west of the Gaming House. He wants a Ruby to fight for you and a suit of Armour. Both these items can be bought from the Salesman, the Armour for 60 gold pieces and the Ruby for a discount price of 150 gold pieces, if you get him the necklace. You will need to gamble if you want to raise the 210 gold pieces needed.

If, like me, you are not very good at gambling you can cheat by changing line 1800 of the file 'Iron3' (inside!Ironlord) to:-

```
1800
A%=5:B%=2:C%=RND(6)+RND(6):
VOICE1,"IronEffect-
ThrowDice":SOUND1,&17F,&255
0,1,60:CALL
throw:SYS"OS_SpriteOp",ISP%
,STR$(A%+18),X1<2,Y1<2,8:SY
S"OS_S
priteOp",290,ISP%,STR$(B%+1
8),X2<2,Y2<2,8:A%=A%+B%:*FX
112,2
```

With this routine you should have no difficulty buying the Armour which you should give to the Mercenary, who when you Discuss with him again gives you the Necklace. Take the Necklace to the Salesman who raises an army and (for 150 gold pieces) sells you a Ruby. Take the Ruby to the mercenary who will raise 3 armies, thus completing this section of the game.

I think the sheer volume of your hints alone deserves a prize, so consider it posted.

# Galactic Dan

Prize Winner

For all those keyboard happy players out there struggling with the bouncing snowmen, here are a few tips straight from the printer of Nigel R. Hepworth of Huddersfield.
We start with the passwords:-

1. Sector One
2. Lander
3. Redwood
4. Desert Spoon
5. Moonfaker
6. Badger
7. Charlie Chan
8. Beaver Scout
9. Chocolate
10. Revco
11. Thunderbowl
12. Fire Walk
13. Black Lodge
14. Windom Earle
15. Night Stalk
16. Candyfloss
17. Midsummer
18. Strawberry
19. Willow
20. Teacup
21. Lovesteal
22. Triple Nine

### Playing hints

1. Spiders move around quickly and are hard to shoot first time. However, they tend to follow a set route, so find a place where you know they will pass and sit there blasting, the Spiders will do the rest.

2. Hostages which are guarded by Spiders may have to be rescued by simply running at the hostage in the hope that you can get there before the spider shoots them. You may get shot in the meantime, but if you are quick the harm will be minimal. If you go in shooting, the chances are that you will accidentally shoot the hostage.

3. Guards are very difficult to kill, requiring a lot of shots - Neutron shells are an effective solution but they are limited. It is better to avoid guards if possible by simply running past them.

4. Eyeballs and similar stationary enemies are usually positioned so that when you enter the area, a hostage will be shot. Sometimes you can position yourself so that you can just see part of the Eyeball, from where you can shoot it. An alternative method is to run quickly into the room, past the hostage, so that you have a clear view of the Eyeball and can blast it without risk to the hostage. If you go in too slowly however, the hostage will be shot.

5. Helicopters can be difficult to hit but, like the spiders, they follow a set route, so you can usually hide out and wait for them to fly into your bullets.

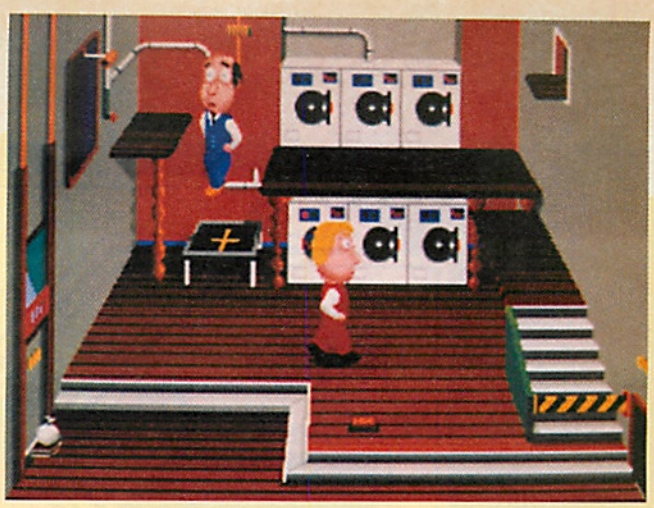
6. Only use the plasma Disrupters to shoot the flashing walls, the Neutron Shells are best saved for the guards.

7. If you see a shot coming from an enemy and cannot dodge it, try shooting it. This will stop it and save you from getting hit.

8. Some levels require you to jump across platforms, this will take a little practice since the platforms are quite small and you are occasionally required to run and jump to clear the gap. In some cases the next platform cannot be seen, here you will have to run and jump at maximum speed (with all digits crossed). It is surprising how far a good leap will take you.

9. The small white round balls must be shot to open doors but do not shoot the square rotating objects as these must be walked into to give extra energy, plasma disrupters, neutron shells or helpful tips.

Cheers Nige, the prize is in the post.



# Starch

**For all those players getting a little hot under the collar, cool down with these helpful hints from Robert Dent of Northants..**

Big Hint: The secret is to let the computer do the work.

Level 1: Let the computer (is it Dave?) drag the trolley to your side and let him pull the chord if the bags get stuck.
Level 2: Let him put the washing in the machine, then wait until it is finished, then put it down the chute to get the promotion.
Level 3: Move to the other side using the balloons and when he puts the washing on the line, drag the line across and put the dry washing in the chute.
Level 4: Force him to put the washing on the ironing board and while he is pulling the lever to it, pick it up and once again put it in the chute.
Level 5: Let him run the conveyor and open the cupboards if they are shut.

I think the thanks should go to Dave on this one, after all he's done all the work.

# Hero Quest

**For all those budding heroes out there, here's a handy little hint for Hero Quest from Garrie Crowther in Wiltshire.**

To get your hands on 9999 gold coins just follow these instructions. Load two or more characters and play 'Castle of Mystery'. The character who you want to receive the money has to find the mine and search for treasure. When he/she has grabbed all the goodies make sure all the characters get killed. Now renew every player and play 'Castle of Mystery' again. This time the character who found the mine originally should walk straight back into the exit. When the quest is finished the character who found the mine in the first game, will have 9999 gold coins and will be able to spend it on all those lovely sharp and pointy weapons.

Great tip Garrie, I especially like the bit where everybody dies.

TIPS Q-TIPs Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS

### TERRAMEX

A quick cheat from Andrew McLachlan for infinite lives, although I'm not too sure about the trees Andrew.
When the selection screen pops up type SUBJECTTOCHANGE, and you'll have the power to go where no baddie basher has gone before.

### CATACLYSM

Now here is a simple but effective cheat from Daniel Fenton.
If it looks like you are going to run out of time before completing a level, just press C and the level is completed, plus you get to keep all your points.

### ZARCH

Neil White says with the sound on, hold down together the Q, T and U keys and the following keys will activate these functions:-

D= Autopilot (on/off)
L= Extra Life
F= Fill fuel tank

### BLOWPIPE

Neil also says that if you start the game with the preset keyboard controls and die, then restart the game after resetting the keys, you get a load of extra lives.
Nice one Neil.

Q-TIPs Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS Q-TIPS

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# AXIS

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Dominik Diamond BAU Spring Show `9

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``...has to be one of the best games out for the Arc.``

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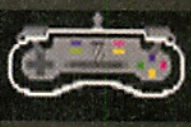

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# Blood Sport

**Matt Black £9.95**
**Graphics 58% Sound 64% Gameplay 55%**
**Overall 56%**

## Karate katastrophe kicked into touch

**In the Pantheon of martial arts games, Blood Sport rates no more than a tiny shrine near the back door. The software equivalent of the Norse God of sausages, or the patron saint of hedgehogs. Mediocre is the word I'm looking for. If you compare it to Street Fighter II, or virtually any other of the similar games available on other formats, it offers nothing new and is just a little bit worse in every department - graphics, gameplay, sound, etc.. Mind you, if you compare it to other fighting games on the Archie...**

It's got all the expected features of one of these games. There are 10 different characters, all with their own ways of fighting and their own special abilities - hurling fire balls, electrified legs, that sort of thing. You've got the choice of playing any of the fighters in either two or one player mode and you have to win two out of three rounds to progress through the competition. Your fighter is controlled via the keyboard, with various combinations of left, right, up, down and fire buttons producing complicated combinations of movements, either attacking or defensive. It will take quite a while to get to the stage where you can deliberately use all these moves, rather than just hitting the keys and hoping.

All this is fair enough, but the game fails as the animation and graphics are poor. The actual playing screen is tiny and your pixelated player, while moving smoothly, is unclear. It's hard to tell when you're actually close enough strike your opponent, rather than just flail wildly in thin air.

There's an attempt at a pretty, atmosphere building loading sequence, whereby your character arrives at the Shaolin temple to challenge his or her foe, but this no more than an irritation as you wait to get on with the game. The slightly animated backdrops look quite good, but only serve to confuse the action that little bit more.

The only good reason for buying this game is that, on the Archimedes, it has very little competition and is offered at a budget price that justifies its quality. Only if you feel your life is meaningless, an empty shell until you get your hands on a martial arts game, should Blood Sport be allowed to make a dent in your wallet.

**JIM BLUCK**

# Tales of Lore

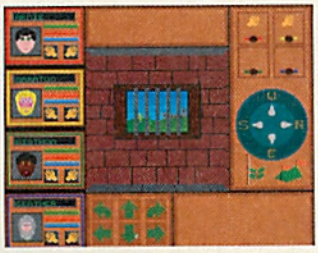
**UK Software £TBA**
**Graphics 73% Sound 70% Gameplay 74%**
**Overall 73%**

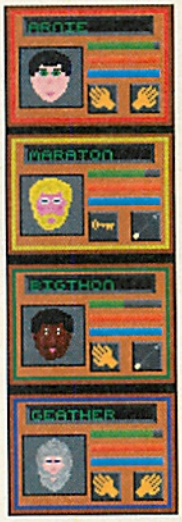
## The long arm of the lore

**The great thing about graphic adventures, from the game designer's point of view that is, is their built in obsolescence. If you want to come up with a new shoot-'em-up or sports sim., you have to be innovative, you have to come up with something which is one step more advanced than the game that has gone before.**

With adventures, all you have to do is think up a new storyline, a few gimmicks and reuse a tried and tested format. Voila, brand new game, not ground breaking but there's an eager market just waiting for the next instalment.

This is what UK Software has done with Tales of Lore. It's another of those four heroes in a dungeon games, seen so many times dating beck to the likes of DungeonMaster. This game works because the format works. It is, in my opinion, the best way to play an adventure game, very user friendly and very neat and tidy. The left of the screen shows your four characters with their various status bars indicating health and strengths, the right hand side can be used to swap objects and weapons around, and to organise your party for the fight ahead. The centre of the screen has the main playing area, with the movement icons and your view of the dungeon. In Tales of Lore, your four characters are a bunch of travellers who have had one too many beers and recklessly decided to enter the fearsome keep and remove the yoke of repression that has been placed on the land by the evil Bill the Almighty. Pretty much standard fare (except for the character's names - Ed.) You start off in a prison cell with nothing. A quick forage around and you'll swiftly be able to equip your party with a variety of gear. To start with it's just weapons and keys, but later on you'll find armour, shields, spell books and potions. Possession of such items is the only way you are going to be able to defeat the numerous bad guys you'll encounter and, beware, they're no push over.






There are loads of traps, hidden walls and puzzles around the dungeon and it will take you a good long time to complete. Make sure you save the game frequently, 'cause Mr Death may well be lurking round the next corner.

Tales of Lore is no more than a solid, reliable product. The graphics are nice but not outstanding, gameplay is no more or less than you would expect if you've played this style of game before. Most game players will know whether they are going to enjoy this game before they even part with their cash, so if this style is your bag and you're stuck without an unfinished adventure, what are you waiting for?

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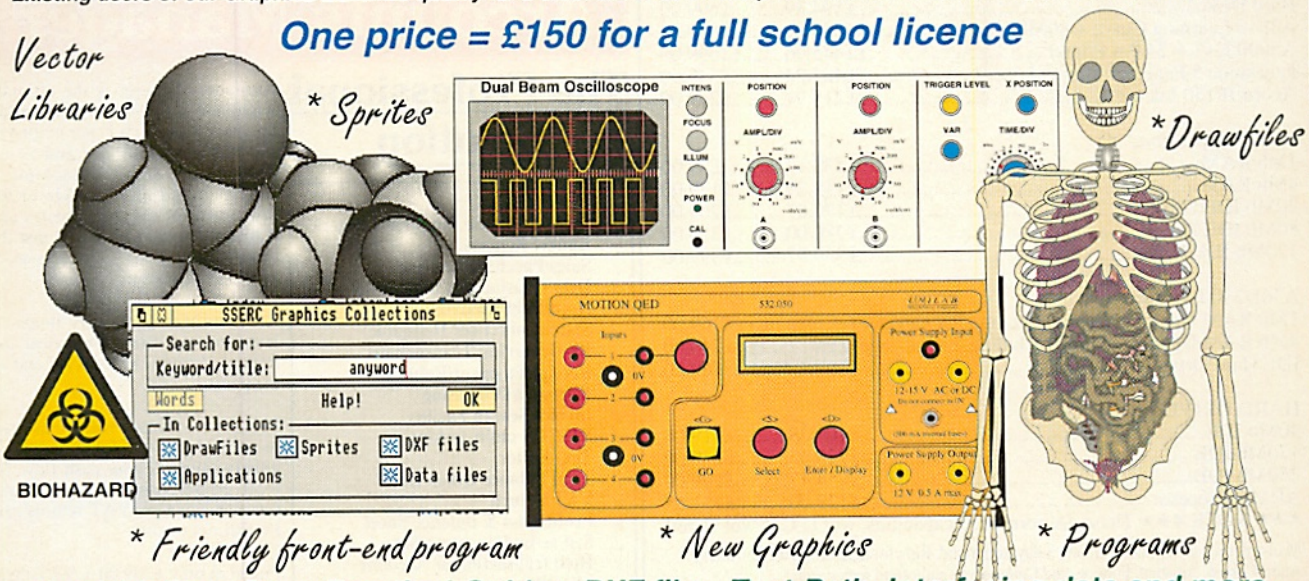


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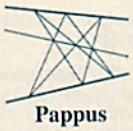
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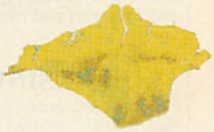
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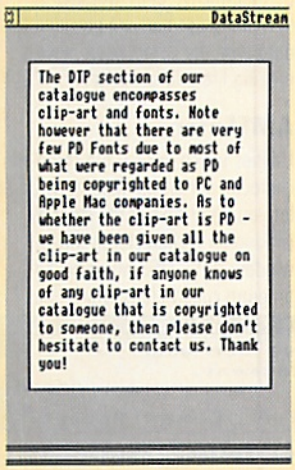
## Catalogue *The Data Stream CA-107*




**Most PD catalogue disks sport a huge text file listing all the PD programs available, with the rest of the disk containing programs as space fillers, but some libraries go to the effort of presenting the list in a more appealing way. The DataStream has adopted Longman Logotron's Magpie as the means of displaying its catalogue.**

With the liberal use of drawings and sprites embedded in the pages, it has succeeded in creating an index which is not only easy to use but attractive to look at as well. Finding the programs you need is as simple as clicking on part of the screen. The catalogue is divided into logical sections such as DTP and Music. After an introductory page, you are shown a list of programs and the disk they are stored on. The beauty of the system is that it takes just a second or two for each page to appear. Another library uses its own catalogue displayer but it takes a long time to load the program list from disk. The Data Stream's catalogue loads rapidly and operates quickly. A single click on the page marker whips you back to the previous index page so finding your way around is a doddle. To find out what The Data Stream has to offer, get its latest catalogue disk.

## Browned off

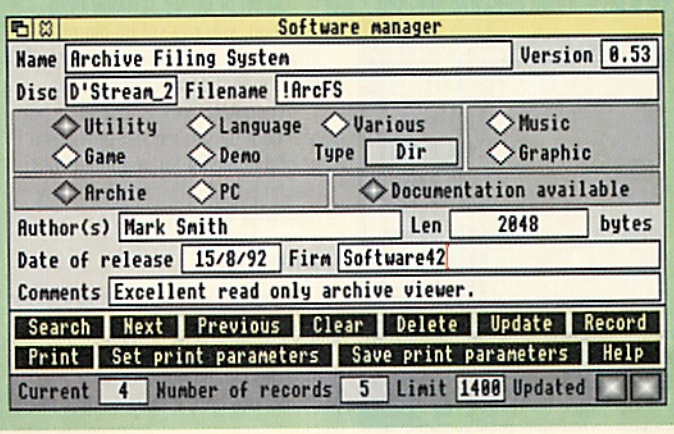
**Matt Browne, not to be confused with Matt Black, is launching a new PD library, Matt Browne PD. Matt himself admits that the name is less than imaginative - a contender for the understatement of the year award, I think. Unfortunately, he's a bit new to this game and is on the scrounge for some PD software to build up his library. I assume he's willing to exchange a disk of PD for each one you send him. If you would like to help, contact him at the address shown in the Factfile.**

## Manager *The Data Stream BD-000*

**Consider how many disks are on your desk or stashed away in boxes. Now compare that to the number of floppies you use on a regular basis. There's usually a big difference. We all have racks of disks which we hardly ever use. The problem is that as soon as an old disk is wiped, sod's law dictates that you'll need the software a day later. It's annoying knowing that among your disks there is a useful little utility that you need in a hurry. The challenge is finding it.**

Feeding a tottering pile of disks into the drive, one after another, is not my idea of a fun way to spend a Sunday afternoon. The answer is to have a detailed index of your disk collection, with each floppy clearly labelled with a unique identifying number. The index is kept up-to-date with all new media religiously recorded. The best place to store the index is on your Acorn and BASS has crafted a program to do just that.

Software Manager is a very powerful database dedicated to a single cause - keeping track of all your software. The programs, clip art, fonts or anything else can be stored on floppy or hard disk, it doesn't matter which. To record details of a program, you first drag it's icon onto the Manger window. The filename and disk label is entered automatically. You then type in extra details such as the Author's name, the publisher and anything else that is relevant. A number of categories are defined and you simply Select the one which the software falls into. A disk number is required to make practical use of the Search option.




Recording details of every program and file in a large collection will take time and after the mammoth typing session, you will want to see immediate benefits. These come when you need to find a program fast. Just fire up Manager and click on the Search icon. It looks for the program by name or category or size or some other criteria. Instantly, a full description of the program is presented, the all important disk number is shown and all you do is pick the relevant disk out of your box.

# AMF Software *ArchAngel U23*

**Characteristic ease of use, neat presentation and concise, clear documentation are the hallmarks of A. M. Flintham's software. And, this disk is absolutely brimming with good stuff for RISC OS2 users.**

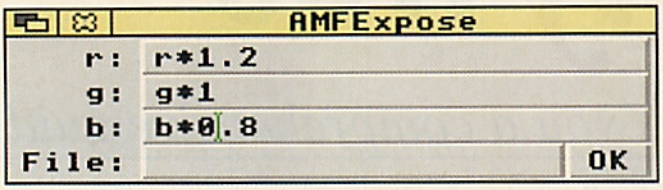
## AMFBack

Boring grey desktops are a thing of the past for lucky RISC OS3 users. Pinboard is an integral part of the new operating system and it allows any sprite to be placed in the desktop's background to brighten it up. File icons can also be placed on the backdrop to be run as if they were in filer windows.

Now, RISC OS2 users, who may feel a little envious of these features can stop looking green. AMFBack is but one of a range of useful programs on a PD disk from A.M. Flintham. This program gives you an attractive backdrop made up of tiled Mode 12 sprites. You can also drag file icons onto the backdrop and they will stick there. Double click on them and they run - just like RISC OS3.

It has to be said that none of this is new, there are already several 'sticky backdrop' programs in the PD. The feature that sets this utility apart from the rest is the unique 'command icons'.

Clicking menu over the backdrop while AMFBack is running opens a menu. Select the Command item and a window appears where you can type an operating system command complete with suffixes such as COPY ~C ~V. A name is given to the command so that it can be identified and it is then shown on the backdrop as a command icon. When one of these icons is clicked, the associated command is executed. If it is a filer command, it is executed when files are dropped over it.



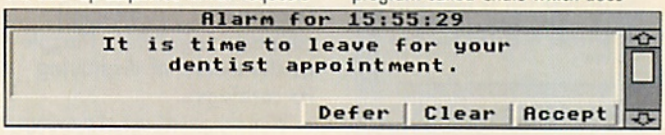

Command icons transform AMFBack into a very powerful desktop tool as they save time typing repetitive commands at the star prompt. This feature, along with the pretty background and sticky file icons combine to form a true desktop enhancement.

## AMFBoot

Another program on this disk is AMFBoot. It is rumoured that back in the good old days of mercury valves, computer operators had to literally kick the computer's case to knock the valves into position ready for start up. Hence the term 'booting' when switching on a computer (ha, nice theory, but don't phone - it's just for fun -Ed.).

Today, booting involves loading a file and executing the commands in it to load programs ready for use. AMFBoot provides RISC OS2 users with an equivalent of the boot file found on RISC OS3 machines. Being able to have programs ready loaded on your computer as soon as it is switched on is a great time saver. If you have a hard disk, auto booting really becomes a practical help. This program does a lot more than simply launch a set of programs on power up. It also keeps a record of everyone who uses the computer in a log. The name of the user is requested at start up and the period of time that the computer was on while they used it is stored. You can later display an analysis of the logged data to see who is using the machine the most. Data security can be a problem on machines that are used by a number of individuals and AMFBoot, in conjunction with AMFProtect, can secure any section of your hard disk against accidental file deletion or unauthorised access. AMFProtect locks certain parts of the hard disk. The security has two levels - read only and password. If the user does not have the password to a certain directory, they cannot display it's contents on the desktop.

Other directories can be displayed and programs loaded, but nothing can be deleted or altered. You can stop unwanted access to any part by including a program at the start of the boot up sequence which requests a password. If the password is not entered correctly the program shuts the computer down.




## The list goes on

There are many more applications from the Doomwatcher on this disk, too many to detail here. However, a brief description is in order, so here goes.

## AMFClock

Clock is similar to Alarm from RISC OS3. It provides three digital time displays. The first two show the system time in hours, minutes and seconds. One is located on the iconbar and the other in a moveable window. The third is a stopwatch timer. Each of the displays can be turned on or off via a menu item selection, you can set an alarm for any time or day and each one can be set to repeat or sound just once.

When AMFClock is loaded as part of a boot up sequence it provides a helpful reminder for important calls, meetings and activities which may otherwise slip your mind.

## AMFDisc

One sure-fire way of knowing if a file has been infected by a virus is to check its length. Boot files and modules should not change size in normal use and, if they do, it is likely that a crafty virus has sneaked onto your system and hidden inside an application. How can you tell if the file sizes have changed? The answer is to create a list of all the files on a disk and their sizes. At a later date you create another list and then compare them. Files which have changed size are then highlighted and you can investigate to see if a virus is active. This is the purpose of AMFDisc.

It needs to be used regularly to be an effective early warning system. Script files are provided to automate the comparison process, making life a little easier.

## AMFEnter

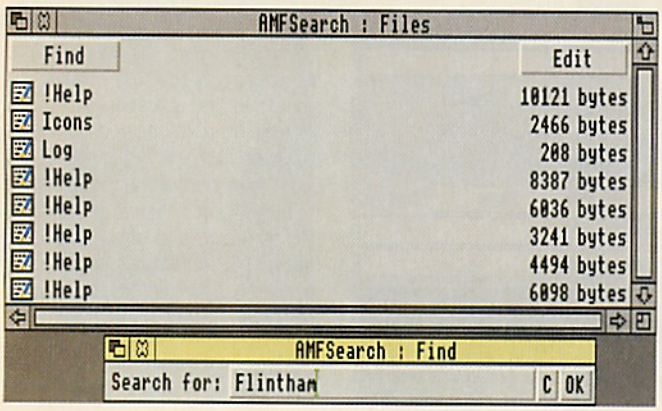
Utilities which display the complete character set are nothing new. Some let you enter text at the caret by clicking on a character in the window. RISC OS3 has a built-in program called Chars which does this. AMFEnter is a kind of enhanced version of Chars.

You can zoom in on the characters to make identification easier. This is handy for symbol fonts which tend to be difficult to see clearly in the usual Chars window. The character's ASCII code is shown and is useful to programmers. One final feature that sets it above the rest is the fact that you can enter characters by pressing ALT while the pointer is over the AMFEnter window. It is therefore possible to enter special characters into filenames in writable icons or anywhere else that text needs to be input.

## AMFExpose

Image processing, for me, is the most fascinating area of computing. Just look at all the morphing animations which have appeared recently in TV adverts and movies. Morphing is at the top end of the image manipulation scale. At the bottom end we have basic colour alteration. This is what this dandy little utility does.

A 256 colour sprite can be loaded whereby it appears in a viewer. It is best to display it in Mode 15 to see the colours properly. You can now alter the red, green and blue colour components of the sprite's palette using a math-



ematical formula - for example, entering (r+g+b)/3 for each of the components creates a grey scale image from a 256 colour sprite.

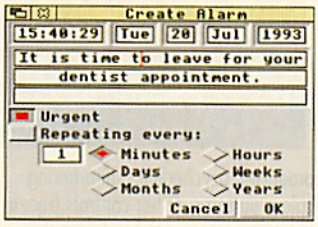
As AMFExpose handles any equation that BASIC V can accept, there are no limits to the range of effects that you can achieve. The problem is devising the necessary equation. After experimenting for a while you will probably discover some interesting equations that produce spectacular results.

The processed sprite can be saved with its new enhanced colours and the equations you have entered can be saved as a script file for later use. Anyone looking for a simple and yet incredibly powerful sprite colour changer need search no longer, this is it!

## AMFSearch

Being able to search for a string across multiple text files is a big time saver. There's no need to load each file into a text editor, or any of the associated fumbling. AMFSearch will find all occurrences of a given string in up to sixteen different text files.

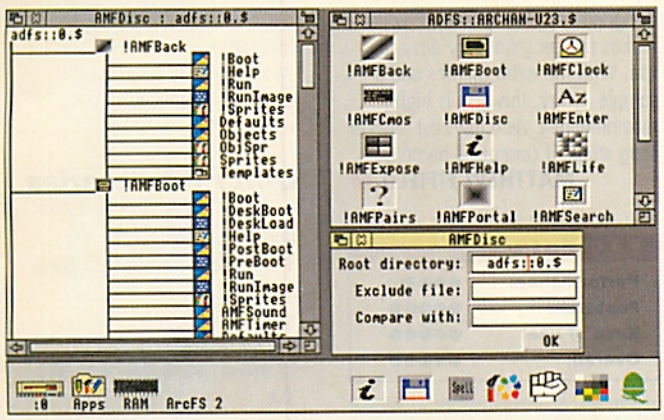
Before you start, you need to drag the text files to be searched into the AMFSearch window. You then type in a description for each one.

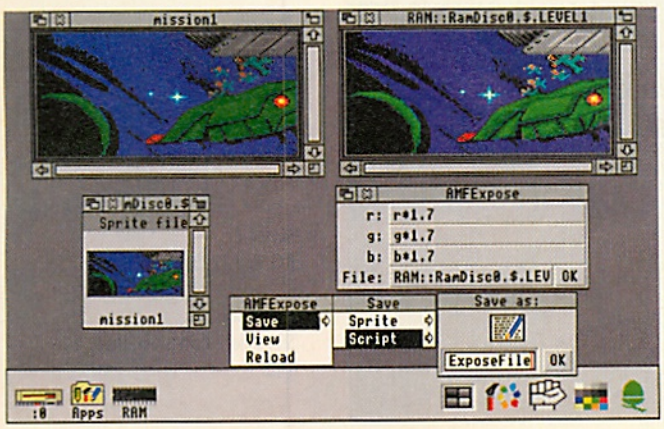



This helps you identify files when they all have similar names. Click on the Save icon and the program saves this list onto disk. When the program is loaded, the list is permanently stored, but can be edited later when you want to include other files in a search.

A window showing the files and their sizes appears. Click on the Find icon to enter the string you want to search for. It is exceptionally fast, searching about 150K of text in ten seconds flat. All the references found containing the string are listed in another window. Clicking on a reference brings up yet another window showing the complete source text.

AMFSearch is useful for finding common words or phrases repeated in many text files. It will even help you improve your writing style by highlighting common cliches or other idiosyncrasies.



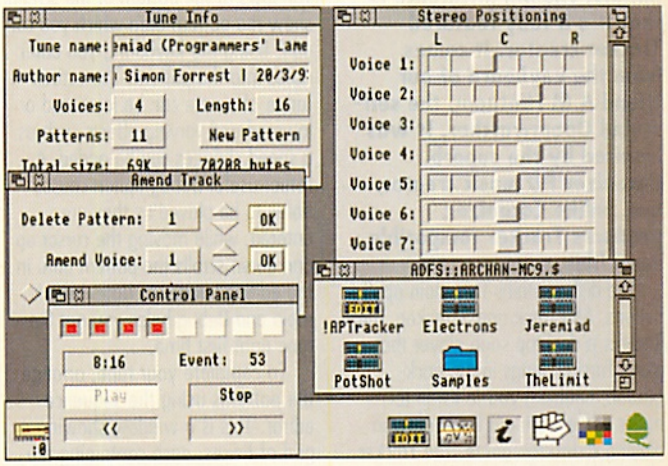




# APTracker *ArchAngel MC9*

**When I was a kid I took my toy walking robot apart to find out if I could change the way it worked. Needless to say it, never moved under its own steam again. This is a rather feeble introduction to APTracker, the program that lets you take Tracker song files apart and, hopefully, reassemble them again to find that they still work.**

First, you may want to play the song to hear what it sounds like. A click on the application icon brings up the Control Panel. Four icons allow you to turn on or off any of the eight voice channels. Click on the Play button and the music starts. Skipping to the next or previous pattern is as simple as clicking on one of the VCR style icons at the foot of the panel. Having heard what it sounds like, you can do your re-mixing. The Samples window lists the 26 instruments used in the song. These can be replaced by dragging some of the many samples provided on the disk. The music can now be played with a different set of instruments and the patterns themselves can be copied, re-arranged or deleted. Combinations of these customisations can radically alter and perhaps even improve a piece.

The program's title is derived from the name of the author - Andrew Pepperell. The Info box explains that he wrote it to save himself £50. This gives the impression that it is a complete Tracker song authoring program and at first it does look like that, but actually it's more like a re-mixing desk. An existing tune can be jiggled about with, but you cannot create a new composition from scratch.




# SWITrace *BD-000*

**One of the hardest jobs a programmer is faced with is debugging his code. The reason is that it's damn difficult to tell what is happening inside the computer when a program is running. To help prevent coders' hair turning grey prematurely, Greg Stewart-Nicholls has placed SWITrace into the PD. This innovative module has just three commands: Trace, TraceOff and TraceFmt.**

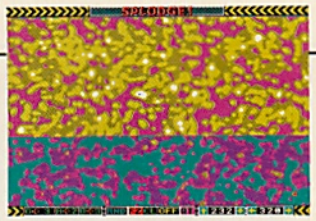
The first command requires parameters defining a range of memory. All SWI calls made from code within the range are logged in a text file. Obviously the memory range is a small part of your program - if you define too large a range the text file will grow at an alarming rate. To keep up the speed of execution, the log should be stored on the RAM disk.

TraceOff switches the logging off. Now you can examine the logged information to check that all the correct calls are being made. Before looking at the text it must be formatted using the TraceFmt command, which sets out the information in an understandable form. The SWI's number and name are shown and underneath is printed the address the call is made at, followed by the content of registers R0 to R7. Debugging low level code is now slightly less daunting, thanks to the SWITrace module.

## Splodge *The Data Stream CH-007*

**When I first saw the Splodge icon, I immediately assumed that it would be a painting application. This is something to do with the fact that there is already a PD doodling program of the same name. However, once loaded, the program clearly identified itself as one of those Cellular Automata thingies. You know, the kind of demonstration in which a grid of coloured dots has a simple mathematical rule applied to it resulting in pretty pattern and colour changes occurring with each step of time. Also on the same disk are Dive and Breeder. Dive lets you 'dive' or zoom into the Mandelbrot fractal beetle in real-time, while Breeder is another CA program. This one can display different CA grids side by side for comparison. That's the disk covered but what about Splodge?**

Splodge takes over the whole screen and nearly all of it is occupied by the cell grid. A menu bar at the foot of the display controls the dimensions of the grid. Make the grid smaller and it updates faster



producing psychedelic, shimmering colour patterns. Other controls freeze the grid or clear it to black. Hit the random button and an explosion of chaotic colour appears, then quickly settles down to a regular series of colours. At the far left are a few numbers which define the maths applied to each cell. Altering these changes the way the display is updated. You can try different experiments to find a pattern which resembles something in real life - you never know you may be first to discover a simulated life form, but somehow I doubt it.

If your favourite bed-time reading is an A level course on applied mathematics, Splodge should appeal. An entertainingly written explanation about CAs is included in the application which does a reasonable job of describing the maths which drive the display. Fractals and chaos theory have become an intellectual hobby for many and with programs like Splodge there is plenty to keep the old grey matter occupied.

## AMFTrack *ArchAngel MD2*

**Like APTracker, this program's title is also derived from the author's initials. The big difference is that it's a fully featured Tracker creator. It comes from the keyboard of our friend A M Flintham, the self-styled Doomwatcher. It was inspired by the superb Coconizer PD music creator, but, unlike Coconizer, produces Tracker compatible song files.**

The disk contains two main applications, AMFTrack and STracker. The latter is a desktop song player that plays Tracker songs in the background, enabling you to listen to music while writing a letter or even playing a desktop game. The Tracker player module found inside the STracker application is used by many programmers to add music to software. AMFTrack is the song editing application and the rest of the disk is filled by three archives that contain a library of sound samples, a couple of example Tracker songs and two useful utilities for converting Atari ST Trackers and sound samples for use with AMFTrack.

To begin making music, load the samples that will act as instruments in the song. This is done by opening the samples archive and dragging icons from there to the AMFTrack Samples window. There's a good selection of instruments to get you started and once the desired sounds are in place you progress to editing patterns.

A pattern is a sequence of 64 time steps and at each step, a sound can be played on any one of four or eight channels. Access the editing screen and the mode changes to a wide screen format, where you will see the editing panel. Eight smaller windows at the bottom of the screen show the pattern data which you can edit. Using the keyboard, you enter notes into the pattern. The octave range of a note can be increased or lowered and varying effects such as a speed changes can be added. A rather useful Debug option causes notes to be played as they are entered, while moving the cursor up and down scrolls the pattern data in the editing windows. Note entry is rapid and Debug helps you get the tune right first time.

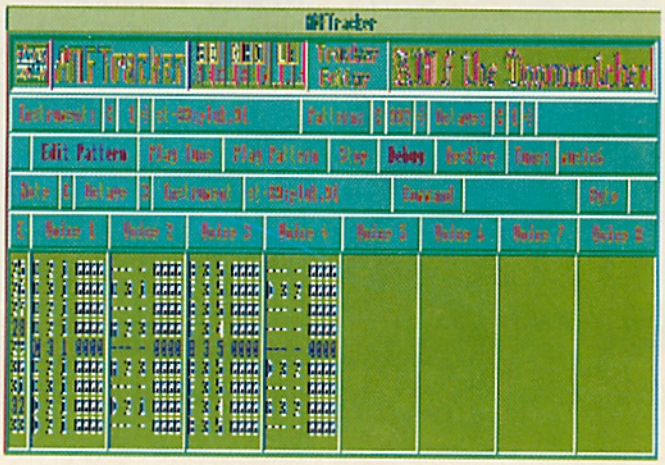
To complete your tune, arrange the patterns using the sequence editor. This is a window showing a grid of boxes, each containing the number of a pattern. To repeat a pattern, insert the same number into a series of consecutive boxes. A complex song can be put together using just a few, well sequenced patterns. Once you have created your musical masterpiece, it can be saved as a Tracker song that can be played independently of AMFTrack using the STracker program. You can also save the samples, individual patterns and the sequence data separately.

AMFTrack will have you creating wicked music (what, death marches and Voodoo chants? - Ed.) in no time. Although some musicians may find the 64 entry patterns a bit limiting, they are flexible enough to produce a wide range of song styles. The editing panel is well designed and clearly laid out which makes this program very easy to use. With the extra utilities and a sample library, this disk is highly recommended. As a low-cost Tracker song studio it cannot be beaten.

**MATTHEW FIFIELD**

**FACTFILE**

| | |
|---|---|
| **Performance:** | ●●●●○ |
| **Features:** | ●●●●● |
| **Ease of use:** | ●●●●● |
| **Overall:** | ●●●●● |




**FACTFILE**

### Our thanks to:

APDL
39 Knighton Park Road, Sydenham, London, SE26 5RN
Telephone 081 778 2659

Arch Angel PD
P.O. Box 41, Exeter, EX4 3EN
Telephone 0392 422759

Liquid Silicon
FREEPOST EH2725, Kirkcaldy, Fife, KY2 5BR

The DataStream
34 Norbreck Close, Great Sankey, Warrington, Cheshire WA5 2SX

### Other PD libraries

Moribund Hedgehog
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Five Star Marketing
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Arcaynia
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The Datafile
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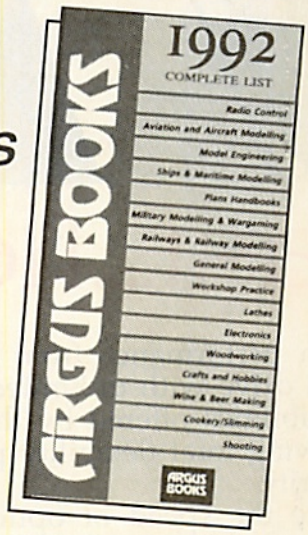


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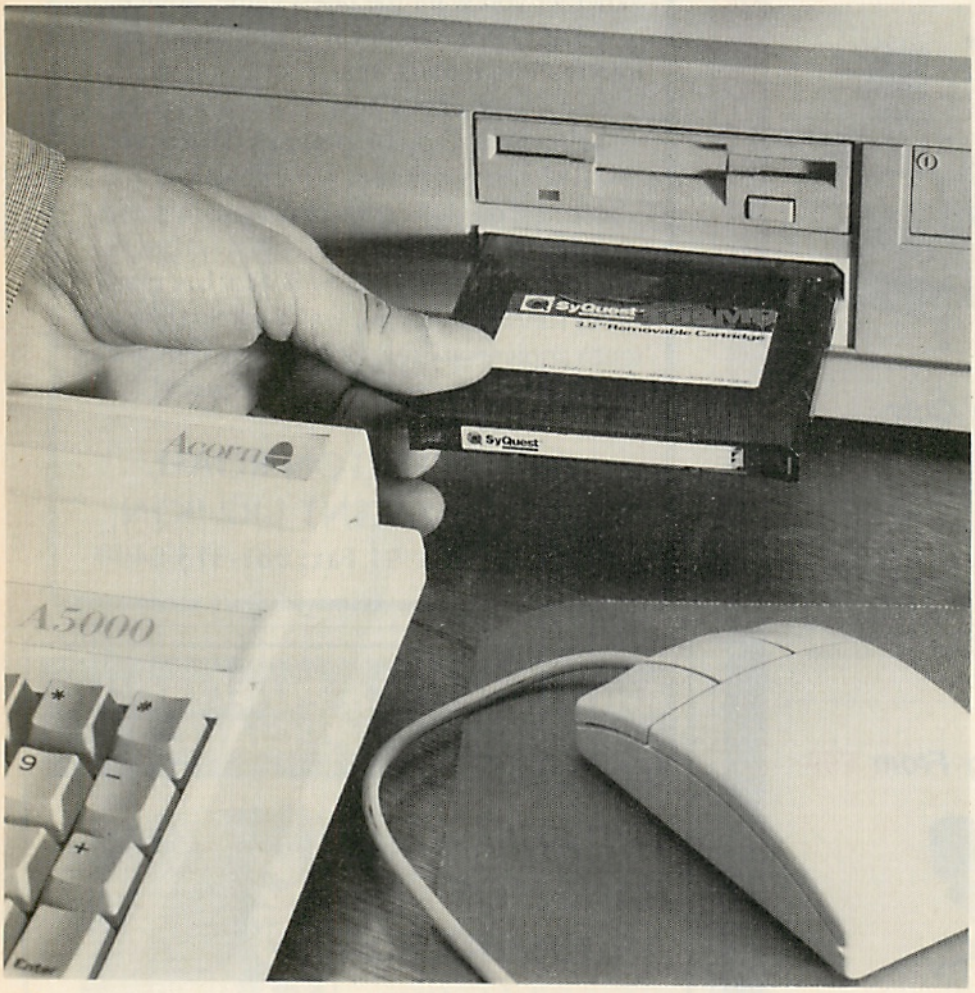


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# Acorn answers

*Is your knowledge of networks thick, thin or just plain twisted? This month, Acorn Answers takes a brief look at the industry standard networks, Ethernet and ArcNet*

## The net is closing in

**I have been thinking about local area networks for the past few months, not because I want to install one, but so that I understand the techniques and ideas behind them. Perhaps you could explain the differences between Ethernet and the more recently introduced ArcNet system.**

**Paul Johnston**
**Basingstoke, Hampshire**

### Ethernet

Ethernet is an industry standard network for the physical connection of machines using a coaxial-wired system. The standard is specified by the ANSI/IEEE 802.3-1990 document and defines the hardware implementations for various topologies of cabling systems. The network communicates between machines (or nodes) at 10M bits per second and uses a baseband signalling technique, in other words the data is not modulated onto a carrier like television signals.

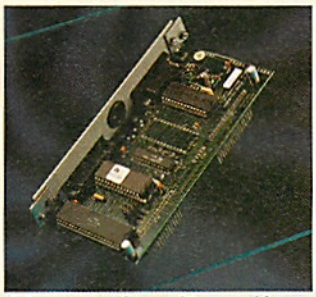
The three topologies commonly used are known as 10Base5, 10Base2 and 10BaseT. Both 10Base5 and 10Base2 use a coaxial cable to provide a backbone onto which all other nodes are connected. The signalling uses a current sink technique, with the centre conductor used for the signal and the shield as a ground reference.

The maximum number of stations on a cable is 30, and the length and spacing of the stations varies according to the cable used. If more than 30 stations or longer cable lengths are required then an Ethernet repeater can be used.

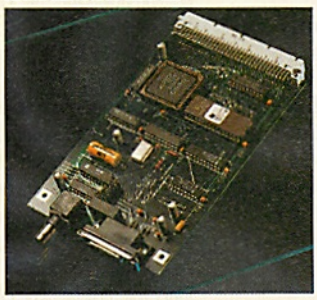
### 10Base5

Systems using 10Base5 or 'thick' Ethernet are easily identified by the 15 pin D type connector employed to connect the signals to the coaxial cable. The length of coaxial cable can be up to 500m and an attachment unit interface (AUI) is needed on the coax, wherever a machine is required. The AUI looks like a junction box and also has a 15 pin connector. An AUI cable connects from the machine to the junction box and may be up to 50m long. Each node must be a minimum distance of 2.5m apart.

If an installation requires more than 500m of cabling then an Ethernet repeater can be used to attach two networks together.



● *A user port, analogue and Econet card for A3000 and A4000 machines*



● *Risc Developments' Ethernet podule*

### 10Base2

This is the cheaper alternative to 10Base5, sometimes known as Cheapernet, or 'thin' Ethernet and runs at the same speed as 10Base5. The specification allows for a lower grade of coaxial cable to reduce the costs involved. The maximum length of cable is 185m.

Each 10Base2 Ethernet card connects to the bus using a BNC type of connector and a T piece. The T piece provides easy access to the network, but care must be taken not to disrupt the network when machines are added or removed by breaking the bus connected to the T piece. Special 'make before break' boxes are available for installations that require regular disruption as machines are re-organised. Each node must be a minimum distance of 0.5m apart.

Ethernet repeaters are also available for 10Base2 where the cable length exceeds 185m.

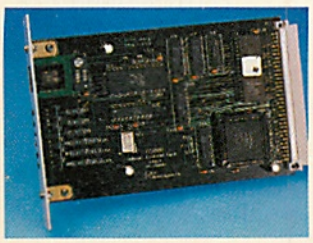
### 10BaseT

One of the major costs involved with the installation of Ethernet is the cabling. Thin Ethernet reduces the cabling costs compared with its 10Base5 counterpart and 10BaseT reduces the cost even further, by using simple twisted-pair voice-grade telephone cable, the type of cable you use for telephone extensions!

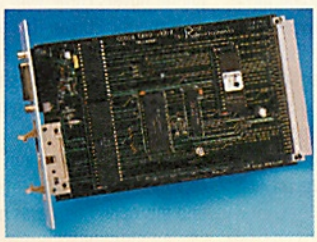
Separate twisted pairs (4 wires) are used for the transmit and receive paths and the system uses a star topology. At the centre of the star is a hub repeater into which all the 10BaseT nodes must connect. The use of the star topology and the repeater has few drawbacks but many advantages over the traditional coaxial backbone.

The key advantages of 10BaseT are the reduced installation cost, the ease of fault isolation and network management and security. Hub boxes are only required for 10BaseT installations and form a sort of logical coaxial cable so that any node connected to the network will see another's transmission.

The hubs can also have either a 10Base2 or 10Base5 connection to the main Ethernet backbone. The hubs are ideal where there may be ➤



● *A 10 BASET Ethernet Card from Risc Developments*



● *User port, analogue and econet card for backplane machines*

several machines in a room that are likely to be relocated often enough to make the fixed junction boxes of 10Base2 or 10Base5 a restriction. The hubs can connect to the traditional Ethernet backbone between rooms or buildings.

The hubs can be used very effective for network management by providing information on each of the nodes connected to it. For example, you can determine which node is the most active and you can perform other actions such as isolating nodes and preventing nodes from using the network at certain times. If a node crashes then it is automatically isolated from the rest of the network without disrupting other users.

Acorn has had 10BaseT installed for every desk at the new headquarters in Histon. The interfaces are connected to a central Ethernet Cableton hub, which routes network traffic around the three-storey building as well as over fibre-optic (10BaseF) links to two other sites in Cambridge.

### ArcNet

A new alternative to Ethernet is ArcNet. This too is based upon an industry standard and communicates at 5M bits per second between nodes.

| | 10Base2 | 10Base5 | 10BaseT | 10Base2 + 10Base5 | 10Base2 +10BaseT | ArcNet |
|---|---|---|---|---|---|---|
| Single width expansion card (A5000, A400 etc) | Atomwide I3 | Atomwide | Atomwide I3 | Atomwide Risc Dev | Atomwide I3 | ACS |
| A3000 Internal expansion card | Atomwide I3 Risc Dev | | Atomwide I3 | | I3 | ACS |
| A3020 / A4000 Network card | I3 Risc Dev | | I3 | | | |
| A4 or parallel port adaptor | Atomwide | | Atomwide | | | |

The system uses token passing where each node regularly receives a token to indicate that it can issue data over the network. Although the data transfer is half that of Ethernet, this token passing scheme achieves better performance when the network is heavily loaded. When Ethernet is heavily loaded collisions occur and the nodes retry, resulting in more collisions and an inevitable performance reduction. With ArcNet, each node regularly receives the token and consequently the performance reduction is less noticeable.

One major advantage and cost saving factor of ArcNet is that it can utilise existing Econet cabling and this can be a big decision factor when upgrading existing Econet based systems.

Unlike Ethernet, the maximum length of ArcNet cabling depends upon the number of nodes connected. With only two nodes, the theoretical maximum length is around 3km! The maximum number of stations on a cable is 32 and this limits the overall network length to 200m, typically an installation with 15 nodes can spread over 750m.

Repeaters can be used, as with Ethernet, to allow additional cabling to be adjoined, each with up to 32 nodes.

### AppFS

AppFS from Angelsoft is provided with the interfaces from ACS and I3. This software enables applications to load up over the network several times faster than using the level 4 file server. The data must still be saved using level 4 since AppFS is a loader only. The user must purchase the server licence to AppFS and this costs £130.

AppFS achieves the speed-up by caching frequently used data in local memory, and by making more efficient use of the network interfaces.

**There are three main producers of Ethernet hardware and only one supplier of ArcNet. The table shows the range of products offered by each company.**

**The unit pricing for network cards is not usually an indication of the costs involved, as every network requires many nodes. All the companies offer substantial discounts for quantities of**

**CONTACTS**

| | |
|---|---|
| **Atomwide**: | Telephone 0689 838852 |
| **Risc Developments**: | Telephone 0727 840303 |
| **I3**: | Telephone 0223 413717 |
| **ACS**: | Telephone 0582 20604 |

# 3 Fonts

**I have an A3000 that I have recently upgraded to RISC OS3.1, but I don't understand the effect this has on the way outline fonts are handled. All my old RISC OS2 fonts appear to work, but what is the difference between RISC OS2 and RISC OS3 versions of the same font, and what improvements will I get if I upgrade them to the RISC OS3 versions?**

**Paul Ackroyd**
**Derbyshire**

Although you say your older fonts appear to work, there is a procedure that must be followed to ensure that the new font system is not affected by older !Fonts applications.

If you have some older RISC OS2 fonts and you wish to use these with RISC OS3, you must include the old fonts in the new RISC OS3 !Fonts application. If you double-click on the older !Fonts directory, you will not be able to use the new ROM fonts.

RISC OS3 includes the Corpus, Homerton and Trinity fonts in ROM and you should not transfer the older version of these fonts. Similarly, if any other fonts are in the new !Fonts, do not transfer the older versions.

To transfer the fonts from the old !Fonts to the new !Fonts follow these steps:

- Open the application directory for both the old and new !Fonts by holding down the shift key and double-clicking on the icon.
- In the old !Fonts there are directories containing each font. Copy only the directories containing the fonts to the new !Fonts, remembering not to copy any older fonts that may be in ROM, or already in the newer !Fonts.
- Once you have transferred the fonts, close the directory and double-click on the !Fonts icon. The new disk fonts will now be available.

You can see what fonts are available by typing *Fontcat at the command line prompt.

All RISC OS2 fonts will function correctly on RISC OS 3 machines but you cannot use newer RISC OS 3 fonts on a RISC OS2 machine.

RISC OS3 fonts have kerning tables built into their outline definitions. Kerning is a term used to describe the process of reducing space between the individual letters. For instance the word AVON has a larger gap dividing AV than that of ON. When kerning is in use, with say Impression, all spaces between letters will be altered automatically, so improving the natural appearance of the text.

# Driving Force

**I am using RISC OS3 and sometimes have to use my older RISC OS2 printer driver. I also use the RISC OS3 !Printers for use with my other printer. My problem is that after using the RISC OS2 printer driver, I cannot use !Printers as I get the error message '!Printers needs PDriver 3.16 or later' and have to reset my machine. Is there a way around this?**

The RISC OS printing scheme uses a module called PDriver to control the printing from applications. Under RISC OS2, printer drivers came with their own specific PDriver that was loaded when the printer was in use. RISC OS3 enhances the print system by allowing more than one printer to be supported using the more capable !Printers application, and this application uses a version of PDriver held in ROM. When a RISC OS2 printer driver is loaded under RISC OS3, it loads its own PDriver module replacing the version in the ROMs. When !Printers is started it checks the version number of the PDriver module and finds that it is incorrect, since it has been replaced by an older RISC OS2 version and this is why the error is produced.

You can use the following sequence of commands to remove the older RISC OS2 PDriver and restore the ROM version. Remember to quit the icon bar application controlling the older printer driver, before using these commands.

First obtain a command line by pressing F12 and at the command line, type the following:

```
*RMKill PDriver
*RMReinit PDriver
```

You can then start up !Printers.

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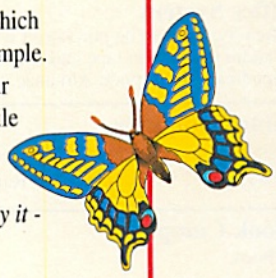

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### Learning Curve System

The Learning Curve System can be purchased with the A3010, A4000 or A5000 range of computers. It consists of an audio instruction tape and software including,- Acorn Advance, PC emulator, Rhapsody 2, Scoredraw, Voxbox, Servour, Darryl the Dragon, Topography, Smart, The Crystal Rainforest, Naughty Stories and Arcventure.

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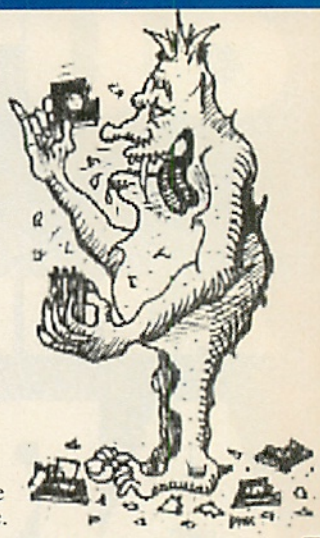

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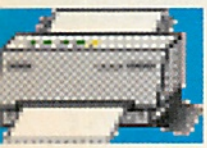
# CLASSROOM '93

*With the new school year upon us, David Watkins brings important news*

### The cost of ink cartridges

The Canon BJ-200 series bubble jet printers take the same size ink cartridge as the BJ-10 series, but users are advised not to use the cheaper BC-01 cartridge in place of the recommended BC-02. This is because the BJ-200 is faster than the BJ-10 and needs ink of a different viscosity. Using the BC-01 cartridge on the BJ-200 series can cause low print density and the print quality can be poor. Anyway, with the BC-02 available for around £20 and the BC-01 for around £19, the cost saving hardly seems worth the risk.



BJ-200 TurboDriver icon

Ink cartridge refills, at half the cost of new cartridges, may seem quite tempting to budget-conscious Heads of Department and to home users, but refilling empty cartridges is incredibly time-consuming and can be quite a messy job. In addition, you need to ensure that you are using the right kind of ink, otherwise you risk the same viscosity problems.

My thanks therefore go to the John Lewis Sales Assistant who pointed out that the Apple StyleWriter II printer uses the same cartridge as the Canon BJ-200 series. Both printers use the same Canon engine, apparently. John Lewis, the store that is never knowingly undersold, currently (July 1993) sells the StyleWriter II Ink Cartridge at £14.25 and the BC-02 at £19.75 (both incl. VAT). This represents a saving of £4.50 per cartridge, or almost 25% of the cost on the price of a BC-02.

Computer Concepts Ltd., producer of the TurboDriver software for the Canon BJ series, sells the BC-02 at £22.31 (incl. VAT) and has no plans to change this price. Apple centres sell the StyleWriter II Ink Cartridge at £15.28 (incl. VAT). This represents a saving of £7.03, almost a third of the higher cost.

These anomalies are due to Canon's pricing policy, say the retailers. If this pricing policy has not changed by the time this information is printed, then BJ-200 users should buy the Apple StyleWriter II Ink Cartridge instead of the BC-02.

### Oak Recorder 2

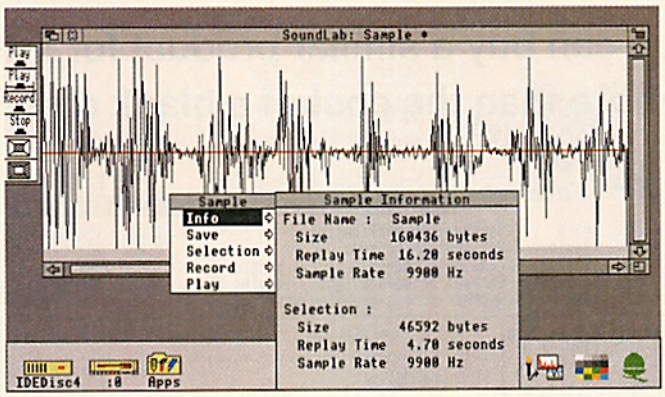
Oak Recorder 2 is the latest version of Oak Solution's sound sampler and has been considerably upgraded from the previous version. It consists of a small adapter, which plugs directly into the parallel printer port, a microphone which plugs into the adapter and a software application called Soundlab to control it.

The microphone is less bulky and of higher quality than the previous model, and is no longer hard-wired directly to the adapter. The adapter itself will accept input via a conventional jack plug or a phono plug and can therefore be connected to any electrical sound source. Sounds can be sampled from an audio cassette player, a VCR, a CD-ROM player, a record player, radio, television, or an electronic keyboard.

The Soundlab software allows users to record and playback sound samples, and to carry out simple editing of samples. Display options include waveform, spectrum analyser, oscilloscope action or voice print.

Samples may be saved as Armadeus files and imported into Genesis applications, or as relocatable modules for use with musical applications such as Maestro.

Teachers who watch the Mapmakers unit of Zig Zag, on BBC School Television, starting on 1 November will see the potential of using Genesis in the classroom and Oak Recorder 2 allows children to include their own sound samples in their Genesis work.




Soundlab software in action

Oak Recorder 2 costs £39.95 and you can contact Oak Solutions on 0954 211760.

### More Genesis

A Genesis application about Networking is being distributed to LEA IT Co-ordinators this term, by Acorn Computers Ltd.

The application consists of three sections and presents text, Drawfiles and sprites, cross-referenced to a Glossary. It explains, to financial decision-makers and advisers, the value of Acorn Universal Networking (AUN) and Options (Acorn's rental package for education).

Networking is a Genesis application

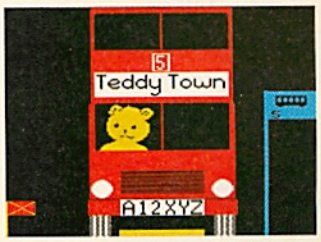
The first section of the application provides information on the benefits of networking - educational, financial and technological. Section Two contains examples of networks, from a simple cluster to a large multi-site network and Section Three establishes priorities and provides advice on creating and designing networks.

The decision to use Genesis for this promotion follows the success of the Computer Aided Art and Design (CAAD) disk, also using Genesis, which was distributed to Colleges of Education earlier this year.

### Last Sherston title for the model B

Sherston Software has announced its last BBC B title - Teddy Bears' Rainy Day. It contains five different educational games; Phone Call, Walk in the Town, Fares Please, Slide and Squelch, and Hot or Cold.

Sherston, whose success was founded on programs for the 8-bit BBC micro, recognises that it is the end of an era. Sad but true. Contact Sherston on 0666 840433.




The last 8-bit bus for Sherston?

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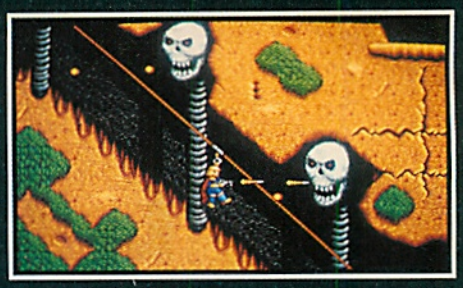

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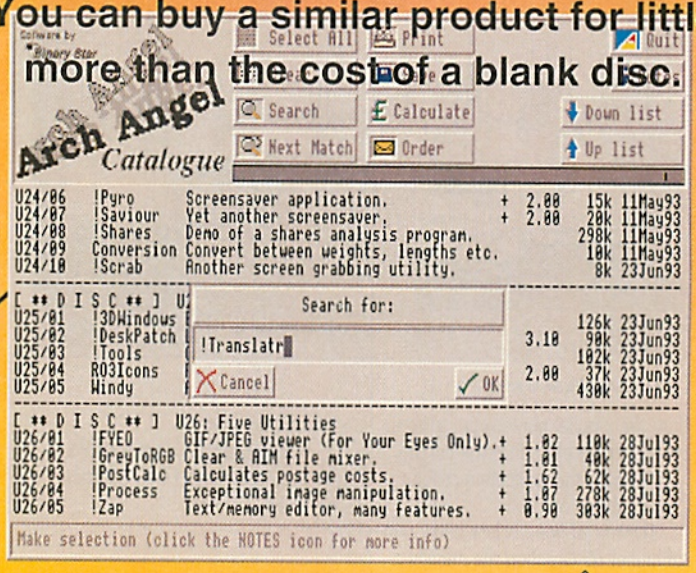


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# ACE of CLUBS

## ARCHIMEDES COMPUTER ENTHUSIASTS

*The benefits of belonging to a club span information sharing, group discounts, special offers and presentations from suppliers. Mark Webb explains*

**The Wakefield Acorn Computer User Group has been a fine example of a thriving club over the past few months and I've not discussed in detail one of the benefits of belonging to a strong club such as this. Large groups like that in Wakefield to attract both the special attention of the software publishers and, more importantly, discounts on their products.**

It is not uncommon for a publisher, having spent an evening presenting the latest and greatest application, to offer highly reasonable terms on purchases made that evening or within an offer period. A national club such as the ARM club attracts permanent discount terms from a number of hardware and software providers, usually in the region of 10 percent.

It's also the case that Acorn related companies, including Acorn itself, treat clubs seriously and try to provide information about products, often ahead of the general public. Wakefield's latest visitor for instance was Clares, when Gareth Owen demonstrated the new version of Pro Artisan before almost anyone outside of the company and major customers could have seen it.

Colton Software's visit for the October meeting (also AGM) will include a look at Fireworkz, the third of the Z-line products. Wakefield club members will therefore be amongst the first to see the full compliment of integrated products.

### Dutch Diary Date

The main continental occasion in the calendar is upon us again. The annual Big Ben show - 600 club members attended last year - is once again held at the Kiekmure centre in Harderwijk, Holland. A number of UK companies including Dabs Press, RISC Developments and Archimedes World will join the club's many special interest groups and Dutch Acorn dealers/software houses at one of the liveliest club shows around.

See you at Die Kiekmure, Tesselschadelaan 1, Harderwijk, on Saturday October 2nd between 10am and 4pm. Admission: free to members, Hfl 7.50 to non-members. It's the club's eleventh open day!

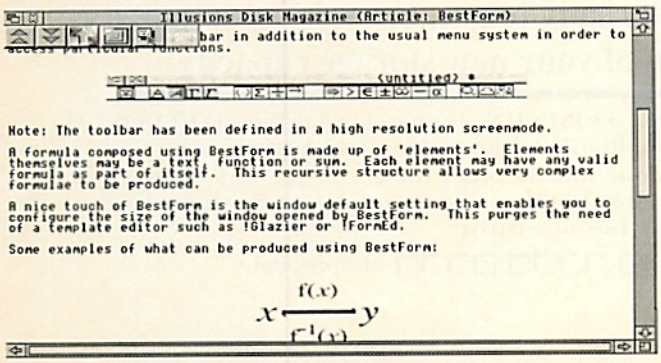
### One Dozen Illusions

Issue twelve of the Illusions Diskzine arrived promptly in August and it's all change again. As hinted at in an earlier column, after its flirtation with Magpie, Illusions is back with its own front end, updated and improved and - I think the editor's got it right - more suited to presenting the articles and features for which Illusions is known. I did detect a slight problem with article titles disappearing behind the toolbox and I couldn't find any use of the sound button but I'm sure this will be developed in the future.

The August issue has a strong hand of reviews, educational software, games reviews and tutorials on Impression and Artworks, BASIC, demo coding and WIMP programming. If you are interested in learning about your computer, Illusions is a good place to begin some serious investigation.

A fundamental advantage of the new reader (the means through which you access the articles, not you) is that it can fit more onto a disk and that allows for expansion. The one PD disk is up to the usual standard with a mixture of the useful and the original. Illusions subscribers pre-merger will have received their two disk PD update between issues and that proved to be a bargain bonus as well, with plenty to play with and a high percentage of programs deserving of a place in the permanent library.

**MARK WEBB**




*Illusions has a new, but familiar, front end, definitely not Magpie. Illusions now features two disks, one editorial, one PD. They are linked by a theme, in the August issue it's education and BestForm is represented by an article and demonstration program.*

## CONTACT LIST

### Clubs

**Club**: ARM Club.
**Membership fee**: £10.00 minimum donation.
**Details**: Contact club secretary Dr Nick Evans, The ARM CLUB, FREEPOST ND6573, London, N12 OBR.

**Club**: Archimedes Users Club.
**Membership fee**: £8.00 per year.
**Details**: Archimedes Users Club, 6 Furzeland House, Sheephouse Way, New Malden, Surrey, KT3 5PH.

**Club**: CAUG (C Acorn User Group), C
**Membership fee**: £12.00 CVu, plus £5.00
**Details**: William Anderson, 18 Heath Drive, Binfield Heath, Henley on Thames, Berkshire, RG9 4LX.
**Club**: Reading computer User's Group (RUG)
**Membership fee**: Free
**Details**: Meeting on first Tuesday of every month. Contact Mike Mallett on 0734 410597 (fax and phone).

**Club**: Wakefield Acorn Computer
**Membership fee**: Annual fee £6 for an individual, £10 for family membership, £6 for corresponding membership.
**Details**: Monthly meetings and newsletter. Secretary Chris Hughes, 95 Cumbrian Way, Lupset Park, Wakefield, WF2 8JT.

**Club**: Cardiff Archimedes SIG.
**Details**: Contact secretary Bill Harwood on 0222 862245.

### User Groups

**User Group**: Elements.
**Membership**: £12 per year.
**Details**: Elements, 42 Keswick Road, Great Bookham, Leatherhead, Surrey, KT23 4BH.

**User Group**: PipeLine
**Frequency**: Four disks per year, separate versions for PipeDream 3 and 4.
**Price**: £22.00 per year.
**Details**: Abacus Training, 29 Okus Grove, Upper Stratton, Swindon, Wiltshire, SN2 6QA.
**Fax/Phone**: 0793 723347.

### Disk Fanzines

**Disk fanzine**: Illusions
**Frequency**: Bi-monthly
**Subscription**: £8.50 for 3, £16.00 for 6
**Single issue**: £3.00
**Supplier**: Illusions, 42 Wimborne Gardens, Ealing, London, W13 8BZ.
**Editor**: John Reed

**Disk fanzine**: New Dawn
**Frequency**: Bi-monthly
**Subscription**: None
**Single Issue**: Free
**Details**: Available as Public Domain, initially from Data
**Editor**: COBRA

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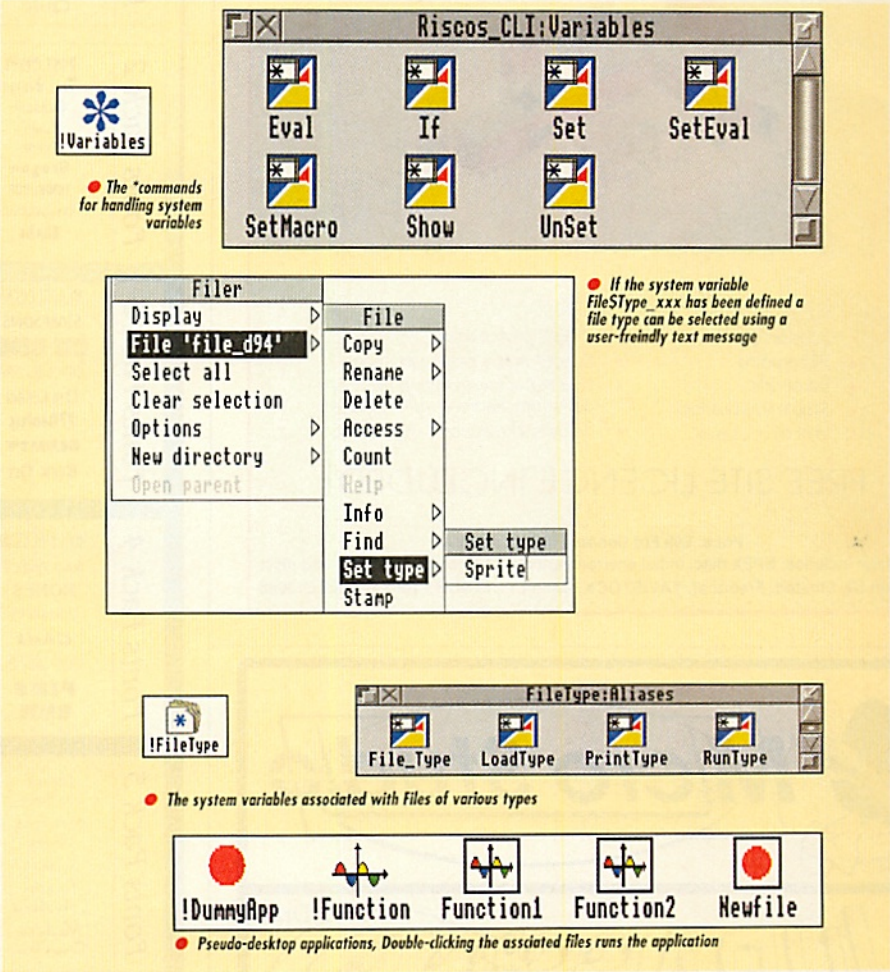
# BEGINNER'S GUIDE
## TO RISC OS CLI Part II - VARIABLES

**As I emphasised in last month's article, the first in this short series, a knowledge of RISC OS CLI (the Acorn Command Line Interpreter) is necessary if the Archimedes is to be mastered. Although this is essential information for programmers, a knowledge of RISC OS CLI would also be of benefit to the general user, allowing him or her to exercise greater control over their system. This month, we examine one of the most powerful features of RISC OS CLI - the use of variables.**

RISC OS CLI variables are maintained by the operating system in the system heap and provide a convenient way for programs to communicate with each other. They are extensively used to control various 'systems' options - e.g. where the computer will look for files, how an application is configured, etc. A well known example of a system variable is Obey$Dir which is the pathname of the directory containing the last obey file which was Run. CLI variables are often called SYSTEM variables and it is under this name which you will find them referenced in the RISC OS3 User Guide and Programmers Reference Manuals.

There are special *commands for defining and using system variables (see Fig.1). For example, to see which system variables are currently in use in your machine, access the command line (in any of the ways discussed last month) and type

```
*show
```




You needn't type the asterisk - I only include it to remind you this is a CLI command. This will result in the computer listing every currently-defined variable, together with its type and contents. The variables are listed alphabetically and you will notice that they tend to come in groups. There will be quite a lot of variables and you will probably have to press the Shift key to scroll the screen. (Pressing the Return key in response to the CLI prompt - asterisk (*) - will return the desktop to its usual state). The general form of the *show command is

```
*show [variable_spec]
```

where the parameters [variable_spec] stand for a variable name or a wild-carded specification for a set of variable names; see page 134 of the User Guide for a description of wildcards. For example:

```
*show File$Type*
```

would list all variables beginning with File$Type (the case is ignored). This command results in an output such as:

```
*Show File$Type*
File$Type_AE9 : Alarms
File$Type_AFF : DrawFile
File$Type_BBC : BBC ROM
etc.
```

This lists all variables of File$Type_XXX, which holds the textual name for a file having the hexadecimal file type XXX. For example, File$Type_FFF corresponds to file type "text". Since different applications may set their own File$Type... variables, this list will vary. The type of a file is actually a 3-digit hexadecimal number, but this is not user-friendly. Types which have a File$Type_. system variable defined can be referred to by their text name - e.g. when setting types in editors such as !Edit, or in Filer windows (see Figure 2).

### Variable names

The names chosen for system variables may consist of any non-space or non-control characters. The case of the letters chosen is preserved although ignored when the value is looked up.

With such a wide choice, ambiguity is very possible - 123 is a valid name for a system variable, but would not be a sensible choice. In any case, system variables must exist in a multi-tasking environment, with their values available to every application. There has to be a disciplined approach to their definition, to avoid clashes with the variable names used by different applications. (For commercial applications, Acorn requires variable names to be registered!) Typically, "system" variables contain a $ sign which divides the name into two sections which are chosen according to rules which help to avoid such clashes. For applications, the first section is usually the name of the application which uses the variable.

### Variable types

The simplest form of CLI variables are strings and integers:

#### String variables

These are assigned using the command

```
*Set varname value
```

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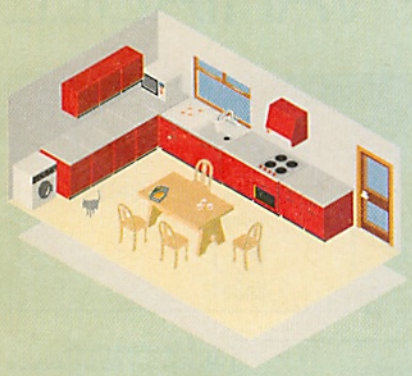

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# BEGINNER'S GUIDE
## TO RISC OS CLI Part II - VARIABLES

**As I emphasised in last month's article, the first in this short series, a knowledge of RISC OS CLI (the Acorn Command Line Interpreter) is necessary if the Archimedes is to be mastered. Although this is essential information for programmers, a knowledge of RISC OS CLI would also be of benefit to the general user, allowing him or her to exercise greater control over their system. This month, we examine one of the most powerful features of RISC OS CLI - the use of variables.**

RISC OS CLI variables are maintained by the operating system in the system heap and provide a convenient way for programs to communicate with each other. They are extensively used to control various 'systems' options - e.g. where the computer will look for files, how an application is configured, etc. A well known example of a system variable is Obey$Dir which is the pathname of the directory containing the last obey file which was Run. CLI variables are often called SYSTEM variables and it is under this name which you will find them referenced in the RISC OS3 User Guide and Programmers Reference Manuals.

There are special *commands for defining and using system variables (see Fig.1). For example, to see which system variables are currently in use in your machine, access the command line (in any of the ways discussed last month) and type

```
*show
```

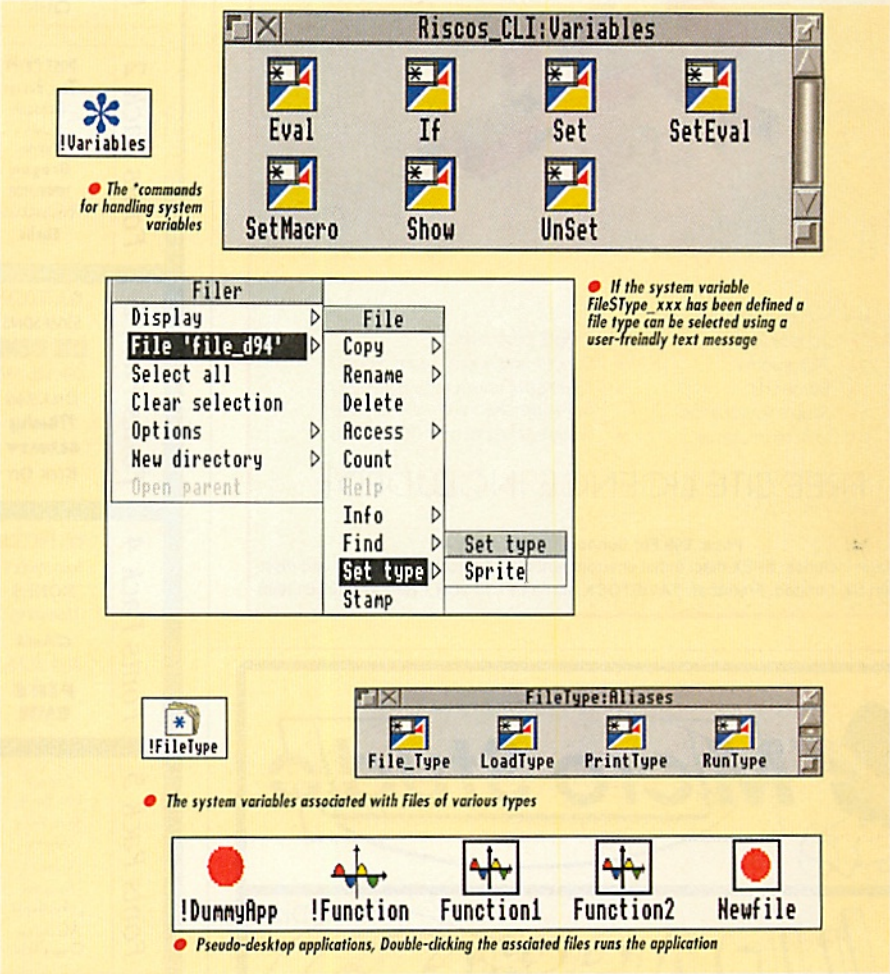
You needn't type the asterisk - I only include it to remind you this is a CLI command. This will result in the computer listing every currently-defined variable, together with its type and contents. The variables are listed alphabetically and you will notice that they tend to come in groups. There will be quite a lot of variables and you will probably have to press the Shift key to scroll the screen. (Pressing the Return key in response to the CLI prompt - asterisk (*) - will return the desktop to its usual state). The general form of the *show command is

```
*show [variable_spec]
```

where the parameters [variable_spec] stand for a variable name or a wild-carded specification for a set of variable names; see page 134 of the User Guide for a description of wildcards. For example:

```
*show File$Type*
```

would list all variables beginning with File$Type (the case is ignored). This command results in an output such as:




```
*Show File$Type*
File$Type_AE9 : Alarms
File$Type_AFF : DrawFile
File$Type_BBC : BBC ROM
etc.
```

This lists all variables of File$Type_XXX, which holds the textual name for a file having the hexadecimal file type XXX. For example, File$Type_FFF corresponds to file type "text". Since different applications may set their own File$Type... variables, this list will vary. The type of a file is actually a 3-digit hexadecimal number, but this is not user-friendly. Types which have a File$Type_. system variable defined can be referred to by their text name - e.g. when setting types in editors such as !Edit, or in Filer windows (see Figure 2).

### Variable names

The names chosen for system variables may consist of any non-space or non-control characters. The case of the letters chosen is preserved although ignored when the value is looked up.

With such a wide choice, ambiguity is very possible - 123 is a valid name for a system variable, but would not be a sensible choice. In any case, system variables must exist in a multi-tasking environment, with their values available to every application. There has to be a disciplined approach to their definition, to avoid clashes with the variable names used by different applications. (For commercial applications, Acorn requires variable names to be registered!) Typically, "system" variables contain a $ sign which divides the name into two sections which are chosen according to rules which help to avoid such clashes. For applications, the first section is usually the name of the application which uses the variable.

### Variable types

The simplest form of CLI variables are strings and integers:

#### String variables

These are assigned using the command

```
*Set varname value
```

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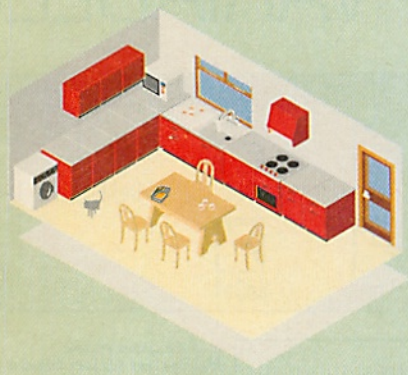

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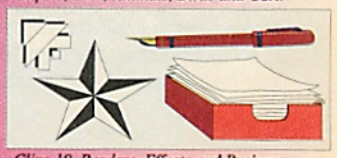

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## TABLE 1 :Evaluation Operators

Some RISC OS CLI commands (e.g. *Eval ,*SetEval, *If, etc.) require that a string containing an expression can be evaluated . An expression is made up of strings and numbers, with brackets for grouping, together with any of the operators listed below. The result returned can be a number or a string. Any strings in the expression are GSTrans'd (see Table 2) except that vertical bar sequences (e.g. |m = ASCII 13) are not recognised. Any item which cannot immediately be treated as a string or a number will be treated as a system variable.

**Arithmetic Operators (Integers)**

| | | | | | |
|---|---|---|---|---|---|
| + | Add | * | Multiply | MOD | Remainder |
| - | Subtract | / | Quotient | | |

**Logical Operators**

| | | | | | |
|---|---|---|---|---|---|
| = | Equal | <> | Not equal | >= | Greater than or equal |
| < | Less than | > | Greater than | <= | Less than or equal |
| -1 | is TRUE | 0 | is FALSE | | |

**Bit Operators**

| | | | |
|---|---|---|---|
| > Arithmetic shift right | >> Logical shift right | << Logical shift left | |
| AND | OR | EOR | NOT |

**String Operators**

| | |
|---|---|
| + | Concatenate eg. "Arc"+"himedes" (="Archimedes") |
| RIGHTn | Take n characters from right. eg. "Archimedes"RIGHT3 (="des") |
| LEFTn | Take n characters from left. eg. "Archimedes"LEFT3 (="Arc") |
| LEN | The length of a string |
| STR | Converts number to a string eg. STR 24 (="24") |
| VAL | Converts to a string eg. VAL "12AB" (=12) |

Thus

```
*SetEval Fred 1
*Eval Fred+1
```

or

```
*Eval < Fred>+1
```

give the same result, namely

Result is an integer, value : 2

## TABLE 2 :The GSTrans format

RISC OS provides a number of facilities for performing conversions. One of the most important is GSTrans for converting or translating strings which is used by several important *commands (e.g. *Set, *SetEval, *Echo ). The rules followed by GSTrans are:

- A character preceded by a | is converted into the relevant control code.
  E.g. |m is converted into ASCII 13
  ( See page 150 of the User Guide for a full list of ASC II codes. )
- An integer in angle brackets is converted into the equivalent ASCII code.
  E.g. < 13> is converted into ASCII 13
- A variable name in angle brackets is replaced by its value, or is ignored if the variable is undefined.

Example 3 :

```
*Set Fred This is a message
*Set Jim Fred
*Show Jim
```

This gives the result

```
Jim : Fred
```

However typing

```
*Set Jim < Fred>
*Show Jim
```

gives the result

```
Jim : This is a message
```

**Example 1:**

```
*Set Fred This is a message
*Show Fred
```

which gives the output

```
Fred : This is a message
```

**Integer variables**

These are standard (four-byte) signed integers and can be set using the command

```
*SetEval varname expression
```

**Example 2:**

```
*SetEval x 1
*SetEval y x+1
*Show x
*Show y
```

gives the output

```
x(Number) : 1
y(Number) : 2
```

The types of operators which can be used in expressions are listed in Table 1. You should note that any strings used in the *Set and *SetEval commands are GS-Trans'd before they are assigned (see Table 2).

The remaining types of system variables are code variables and macros. A code variable is a machine code routine which is called whenever the variable is to be read, and another when it is set. An example of a code variable is Sys$Time. Macros are set using the command

```
*SetMacro variable macro
```

which assigns the string macro to the system variable. This string is GS-Trans'd each time the variable is read.

**Example 4:**

```
*Set a <Sys$Time>
*SetMacro b <Sys$Time>
```

Each time the program

```
*Eval a
*Eval b
```

is run, variable 'a' shows the time when it was set, but 'b' shows the current time. The *Eval command is like the *SetEval command except the value of the expression is printed out rather than saved as the value of a variable.

All system variables can be deleted using the *Unset command

### Aliases

System variables of the form Alias$cmd, where cmd is a word made up from the alphanumeric letters (together with !'()+-.;=?@[]_`{}~ ) play a special operating system role. On receiving a *command, RISC OS tries to match it with an appropriate alias and if it finds one will use this instead.

**Example 5:**

```
*Set Alias$Greet Echo Hello
*Greet
```

results in the computer printing out the obvious message.

Warning! Alias checking is performed prior to commands in the kernel being performed thus the usual meaning of *commands can be altered. For example,

**Example 6:**

```
*Set Alias$Cat Echo Mieow!
```

If the command *Cat is issued, the appropriate disk will not be catalogued. To override alias checking and use the proper command, preface the command by a percent sign, e.g. *%Cat would cause the disk to be catalogued. If you examine the !Boot and !Run files of the applications in the Resource directory you will see that the commands such as *Set have all been prefaced by a % sign. Just as with Obey files, parameters %0, %1, ... , %9 are allowed.

**Example 7:**

```
*Set Alias$Greet Echo Hello %0
*Greet Jim
```

gives the output Hello Jim. An ambiguity when Aliases are defined in Obey files. If the above command were written in an obey file (see Example 7 on the disk) the %0 would be interpreted as a parameter for the obey file when it is run and %0 would be replaced by this value when the obey file is run. If there were no parameters this would be the null string and Alias$Greet would have the value "Echo Hello" rather than "Echo Hello %0". This confusion as to when a parameter belongs to the obey file or to the alias is settled by using two percent signs, e.g. *Set Alias$Greet Echo Hello %%0, when such a command is to be written in, and executed from, an obey file.

By using the *If command we can have alternatives.

**Example 8:**

```
*Set Alias$Greet If "%0"="Sally"
THEN Echo Goodbye %0 ELSE Echo
Hello %0
*Greet Sally
*Greet Fred
```

Since strings in the *Set command are GS_Trans'd, the control character |M is transformed into ASCII 13 (the Return character). Thus sequences of instructions, separated by the return character, can be applied to an alias so making a more complicated sequence of commands. Just like the *Key command, for programming the function keys, which you might remember from the old BBC micro.

**Example 9:**

```
*Set Alias$Greet Echo Hello %0
|m Echo Goodbye %0
*Greet Jim
```

**gives the output**

```
Hello Jim
Goodbye Jim
```

## Aliases associated with file types

As we have already noted above, files have a 3-digit hexadecimal number associated with them - their file type. When a date-stamped file of type xxx is *Run, the FileSwitch looks for a variable Alias$@RunType_xxx. If a string (or macro) variable of this type exists, it is copied and the full pathname is used to find the file. Any parameters are passed. This is also what happens when a file is double clicked in a Filer window, if no other active application deals with it. To see the currently defined Run aliases type (at the command line)

```
*Show Alias$@RunType_*
```

We can define our own Run aliases, e.g.

**Example 10:**

```
*Set Alias$@RunType_000 Echo %0
```

Thus, if a file of type &000 is double-clicked it will print out the pathname of the file.

In last month's article we looked at how the Acorn application !TinyDirs could be used to run a non-wimp application, from the desktop, and which takes its input from associated files. Another technique for writing such an application is to define an associated file type for the input files (including designing a sprite). We could define a RunType alias such as

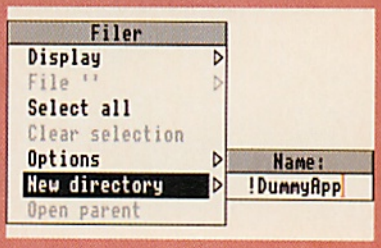
```
*Set Alias$@RunType_000 Set
Stored$File %0 |M Run application
```

which would store the pathname of any file that was double clicked in a system variable, which can then be accessed from the application run. A BASIC function for reading the value of string system variables can be found in the !Run file of the application !DummyApp on the disk. The process for writing such applications is outlined in Table 3; see also the applications !DummyApp and !Function in the "DeskApps" directory on disk. It is possible for non-wimp programs to output to the desktop with the help of the applications directory in RISC OS3. Next month we will explain how to do this.

**JOE TAYLOR**

### TABLE 3 : Creating a desktop, non-wimp application

Stage I : Create a new application in a Filer window.




Stage II:Create a !Sprites file containing a sprite with the same name as the application and also a sprite with name file_xxx (assuming your application is to have files of type xxx as input.)

Stage III : Create a !Boot file of type Obey

```
IconSprites < Obey$Dir>.!Sprites Set DummyApp$Dir < Obey$Dir> Set
File$Type_001 Dummy Set Alias$@RunType_1FE Set Dummy$File %%0 |M
Run <DummyApp$Dir>.!Run
```

(Replace every occurrence of "Dummy" above by the name of your application ).

Stage IV : Create a BASIC !Run file.
Your application directory now looks like (the text !Help file is optional):

When any file of type xxx is double-clicked, its pathname is stored in the system variable Dummy$File and the !Run program is then obeyed. It is easy for the !Run program to read the value of this variable.

# NETGAIN FOR ETHERNET

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|---|---|---|---|
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| Artworks | 136 | 87 | 8 |
| Maestro | 15 | 9 | 3 |
| Pipedream | 20 | 6 | 2 |
| Squirrel | 35 | 10 | 2 |

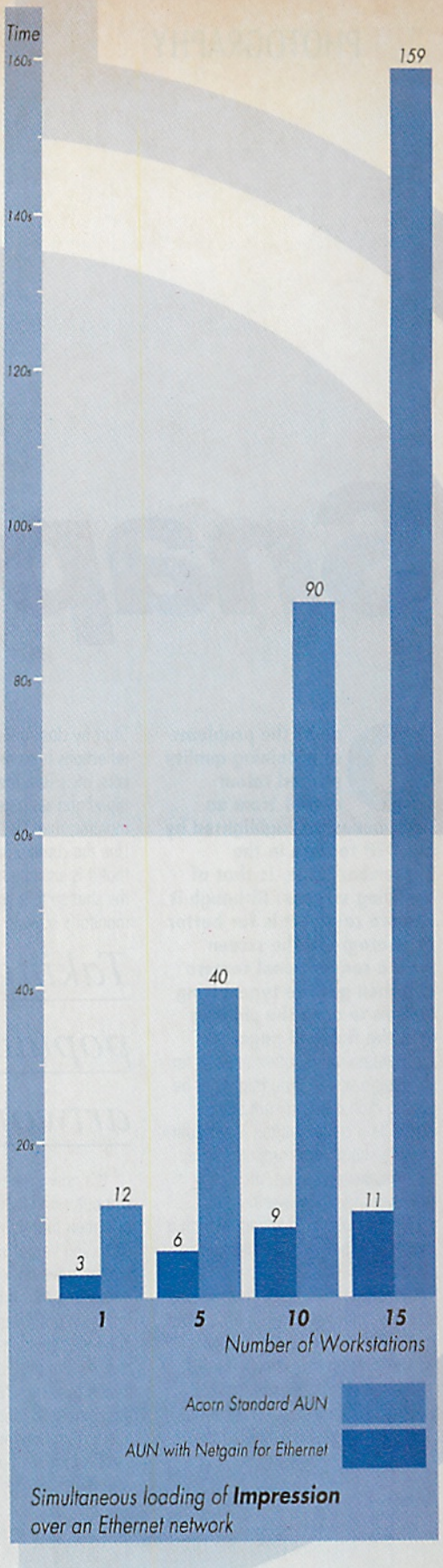
The only hardware required is an expansion card in the Netgain server, which would typically also run the Acorn Level 4 fileserver.

**NO MORE THAN 64K OF RAM IS TAKEN FROM ANY WORKSTATION.**

Standard Ethernet interfaces may be utilised.

Typical transfer rate from a standard Ethernet system is approximately 200K/sec but Netgain achieves up to 900K/sec. In addition to this transport throughput increase, intelligent caching and a general reduction in bottlenecks result in staggering reductions in load times for typical applications.

The system manager simply copies their applications into the Netgain filer on the server, and from then on these products will automatically appear within the Resources directory viewer from the Apps icon on the icon bar, just as if the programs were in ROM.

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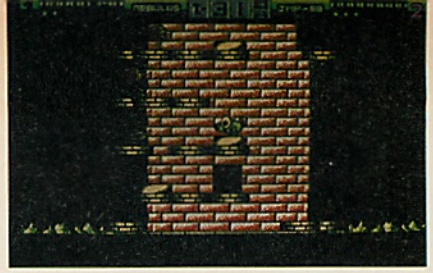

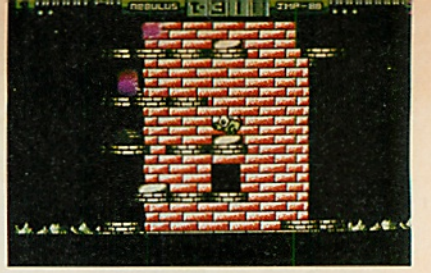

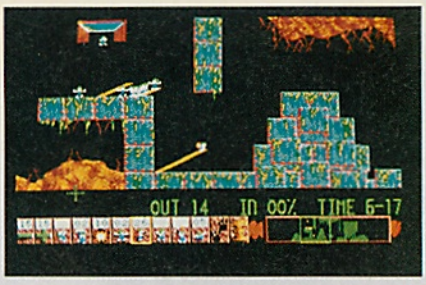


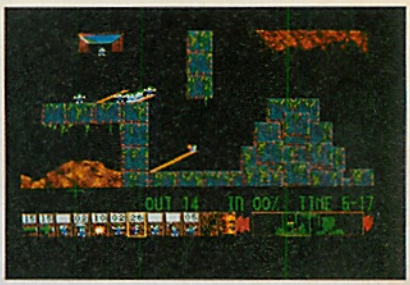


# Snapshots
## into the light

*Taking photographic screen shots is a popular way of getting colour copies of artwork. Here's how you do it*

**One of the problems of obtaining quality printed colour output from an Archimedes, as highlighted by our DTP feature in the September issue, is that of grabbing screens. Although it is more costly, it is far better to photograph the screen with a conventional camera and then get the typesetting bureau to drop the pictures into the finished page.**

There are many other reasons for shooting a screen. You might not be able to grab it or may not have access to a colour printer. You might want to shoot your computer set-up with images on screen, etc. However, if you've ever tried it, you'll probably have ended up with a screen with a dirty great black line across it.

Taking a photograph of a television or monitor screen is a little more involved than your average snap. You need to go to certain lengths to get it right and it may well take a great deal of practice. But, with the aid of this article, you'll be on the first rung of the ladder to success.

### After dark

The first thing you must have to get good shots is darkness. Every monitor screen has reflective properties and you must remove the chances of shooting your own reflection or other shadows. The only way to achieve this is to ensure that there are no other light sources in the room. Because most people don't own black out curtains, you are largely confined to shooting at night. Once the sun has gone down, you can start your shoot.

Start by closing the curtains to avoid reflections from the moon, passing cars, etc.. Turn the light on, grab your tripod and set it up in front of the monitor, then fix the camera in place. Line the camera up with the screen so that it is just about central and frame the shot so that you can see all of the monitor's screen.

It's now time to start the computer and load up the software or screen that you want to shoot. Once you've got what you want on screen move back to the camera and make sure that it is correctly focused. If it is an autofocus camera, it is a good idea to switch this feature off as even the best systems can be fooled by a monitor's surface. Switch the camera to manual and set the aperture to between f5.6 and f8. In some situations you can get away with much smaller apertures, right down to f32. But remember, the smaller the aperture, the less light reaches the film and the exposure needs to be increased.

### Speed is of the essence

Getting the shutter speed correct is crucial. A television or monitor screen will update at around 50Hz (50 times every second) and it is a common misconception that you should use a shutter speed that matches the redrawing speed of the screen. All this does is capture and freeze the redrawing of the image that you would not normally see. On film, this looks like a black line across it at some point and is not desirable.

What you want to achieve is a static image. Here, you reverse the rules of standard photography to get the results. The slower the shutter speed while shooting a CRT display, the more stable the image will be as it is not freezing the redraw. Take a look at the example pictures to see the results of a shutter speed that is too fast and compare them with those shot at slower speeds. Naturally, it is almost impossible to hand hold a camera at speeds of 1/2 a second and below and avoid camera shake. Make sure you use a tripod or a similar camera stability device.

The best shots of a screen are obtained by using a shutter speed of one second or longer.

### Expose!

Getting the exposure correct is a bit of a bugbear. It is very much a trial and error thing and there are no hard and fast rules. The problem is that, particularly with games, different areas of the image emit vastly different levels of light. Whilst your exposure may be spot on for the darker areas, the lighter portions of the image burn into the film. When the film is developed and printed, the light areas glow too brightly in contrast with the rest of the shot.

The only way to avoid this is to bracket your shots. On screens where there is little difference across the board, two shots should suffice, but when you get a lot of colour and brightness variation, it is advisable to shoot at least three shots of the same image, changing the exposure of each slightly. In extreme situations, I shoot four or five images of the same screen.

This may sound as though it's a waste of film, but look at it another way - if you get it back from the development lab after having shot a different screen on each frame, you could find yourself with no usable images - that's the biggest waste.

### Shoot

That's about all there is to say without getting too technical. The only thing not mentioned so far is film. All you need is a good quality roll of film with a rating of 100 iso or slower, to avoid grainy shots. Transparency or prints work equally well, but trannies have a better colour saturation.

The best thing to do now is experiment.

**CHRIS CARLISLE**

*Lots more to see and do at the*

INTERNATIONAL 63rd

# MODEL ENGINEER & Modelling Exhibition

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- **Radio control boats**
- **Remote Control Cars (December 31st January 2nd, 3rd & 8th)**
- **Indoor fun flying (DPR January 1st, Midair & SAMS January 6th)**
- **Scalextric - races for everyone**
- **5" - gauge steam railway – rides for everyone**
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***Show Guide*** giving a diary of events available from 3rd December. ***Auction enquires*** ring Tom Rose, Christie's Tel: 071 581 7611. Further information, Competition entry forms and details of RNLI special train from north Wales obtainable from Argus Exhibitions, Argus House, Boundary Way, Hemel Hempstead, Herts. HP2 7ST. Tel: 0442 66551

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There will be a return coach service direct to the Exhibition at a cost of £6.00 per person on the dates shown. Please tick if required: January 1st ☐ January 8th ☐

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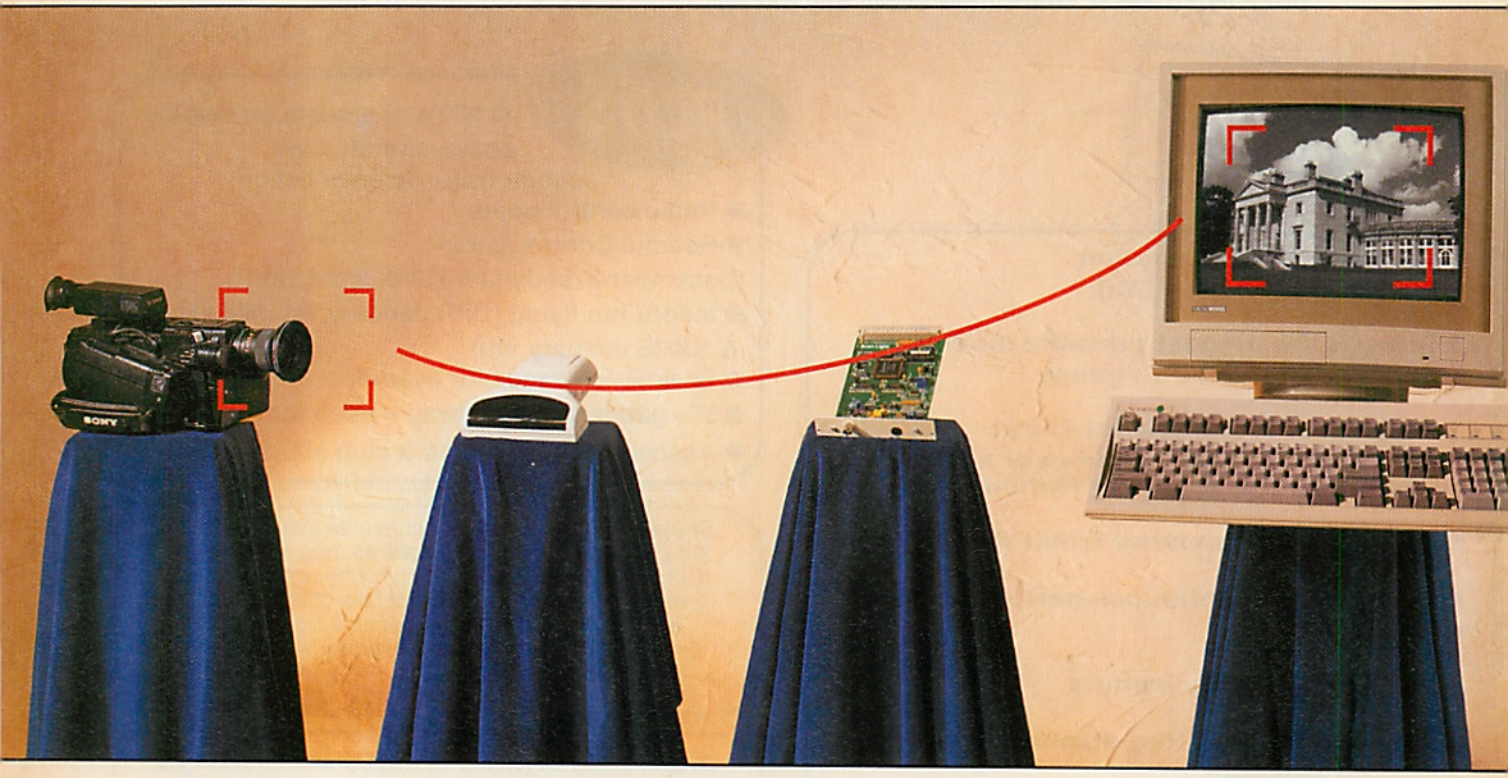
SCANLIGHT VIDEO 256

# • RAISE YOUR IMAGE CAPTURING POTENTIAL •



**ScanLight Video 256 provides the ultimate image capture solution by combining the ScanLight 256 greyscale scanner and the GreyHawk fast greyscale video digitiser on a single expansion card.**

By combining both scanning and digitising features on one card you can now have the best of both worlds. Scanners are ideal for capturing printed diagrams, pictures or photographs, while a video digitiser can be used to capture images from video sources such as video cameras or television. This single board solution saves not only money but also an expansion slot over the traditional two card solution.

## Hardware

- Single width expansion board suitable for A300, 400, 500 and A5000 computers.
- Supplied with hand held greyscale scanner, 100 to 400 dpi resolution, 105mm scanning width.
- Monochrome, 16 grey level or 256 grey level image capture for photographic quality results.
- Straight edge scanning ruler to ensure straight and accurate scans.
- Composite video input digitiser.
- 256K RAM framestore, 8-bit, 256 greyscale digitising ability, real time capture.
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## Software

- Ultra fast 'Take One' video preview application provides video in a window on the desktop – up to 50 frames a second at quarter screen size.
- ScanLight image processing software provides a host of processing options for captured images; detailed brightness and contrast control; on the fly screen dithering for best quality images in 16 colour screen modes; image cropping, rotating, enhancing, sharpening options; instant image rotation by any angle.
- Save images as 256 grey level sprites – suitable for practically any RISC OS software.

What's more, upgrades are available from the GreyHawk and some ScanLight 256 products. Details on request. The package is supplied complete with interface board, manuals and all software.

Min 2 Mbytes RAM recommended.

ScanLight Video 256 - £220 + VAT (£258.50 inc).

ScanLight 256 - £189 + VAT (£222.07 inc).

GreyHawk greyscale digitiser £99 + VAT (£116.32).

**Available from selected Acorn dealers or direct from Computer Concepts' direct order hotline - 0442 63933 or from Wild Vision on 091 519 1455**

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The disc includes:

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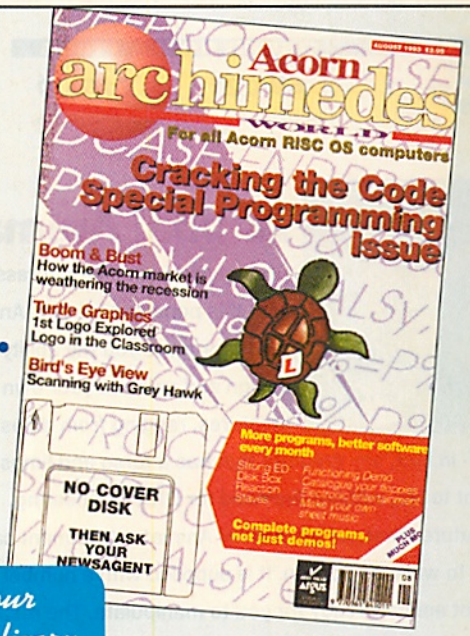


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# software Sale

## Starter Pack V2.0

The new, revised starter pack has been carefully compiled to provide new and experienced users of Acorn's 32-bit computer system with an array of useful programs. There's something for everyone with a mixture of 28 utilities and games all on one disk.

| | |
|---|---|
| Algebra | Calculates numeric expressions |
| Bas-Text | Converts Basic programs to text files |
| BBC-Arc | Transfer BBC files to your Archimedes |
| Cells | A graphical adventure game |
| Char Def | Define your own system fonts |
| Chronicle | Gives a history of events |
| CLIA | Desktop enhancer with many features |
| Columns | A game of thought; match the coloured blocks |
| Connect 4 | A classic. Get four counters in a line to win |
| Convert | Lets you convert imperial to metric |
| Currency | Converts sterling into foreign currency |
| Disk Man | Keep a track of your disks with this database system |
| Dissass | Peek at the computer's memory with this dissassembler |
| Dzap | With this program you can edit tracks and sectors of a disk |
| Font-Draw | Allows you to convert fonts into draw files |
| Fractlands | Generate fractal landscapes on your desktop |
| Impstat | Gives the status of an Impression document |
| Keystrip | Edit and generate keystrips |
| Missile | Another classic arcade game. Save your cities from attack |
| Module Maker | A complete course in how to write modules |
| Morph | Make a house turn into a car with this program |
| Resistor | Calculate the values of colour coded resitors |
| Solitaire | The board game where one ball must be left in the middle |
| Tacitus | In this awesome game, you will need your wits about you |
| ThreeView | Animate 3D objects, draw, rotate, and tilt them |
| Winsave | Save any desktop window, ideal for all DTP work |
| Woody | Collect the gold, watch out for blobs! |
| Z88-Arc | Transfer data from a Z88-Archimedes |

| INFO | DISKS | ORDER NO. | PRICE |
|---|---|---|---|
| | 1 | AW021 | £15.00 |

## Musix

**Whether your musical tastes are classical, rock, pop, jazz, blues or dance, you can create your own audio tracks with Musix.**

**Musix is a sophisticated sound track editor which offers ease of use. In no time at all, you will be composing your own patterns, adding your own sounds and building them up into a tune which you can add to any program you wish.**

**Musix is supplied with a library of over 100 instrument sounds for you to use in your own compositions. A second disk in the pack contains a range of tunes which you can use for demonstration purposes or to provide an illustration of how Musix can make music.**

| INFO | DISKS | ORDER NO. | PRICE |
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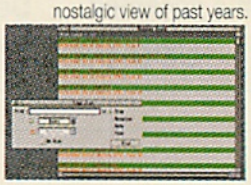
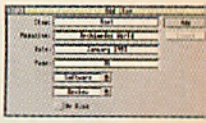
| | 2 | AW015 | £10.00 |

## Archiver

Wading your way through piles of magazines can offer a nostalgic view of past years. But, if you're looking for one particular article, it can be a nnoying to sift through bundles of back issues. That's where Archiver comes in.



Archiver allows you to enter details of articles in magazines so that you can store them away for later retrieval. Simply tap in the details and pile your magazines up in chronological order, then let Archiver do the searching.



Archiver is supplied complete with a ready-made database detailing the content's of each issue of Archimedes World, up to August 1993.

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| | 1 | AW022 | £10.00 |

## Image Library

A compilation of previous disks to provide an extensive collection of images for your use. This item has been completely repackaged and is now supplied on seven compressed disks by Matt Black, exclusively to Archimedes World.

The library offers scenes which are categoried into fantasy, cartoons, cars and much more. Also, the collection contains a huge number of Van Goghs!

This collection really shouldn't be missed. It contains over 30Mb of compressed files and is educational and entertaining, making an ideal present.

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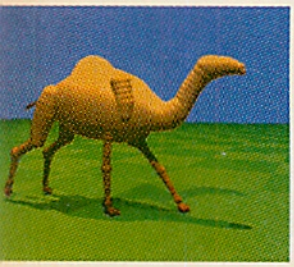
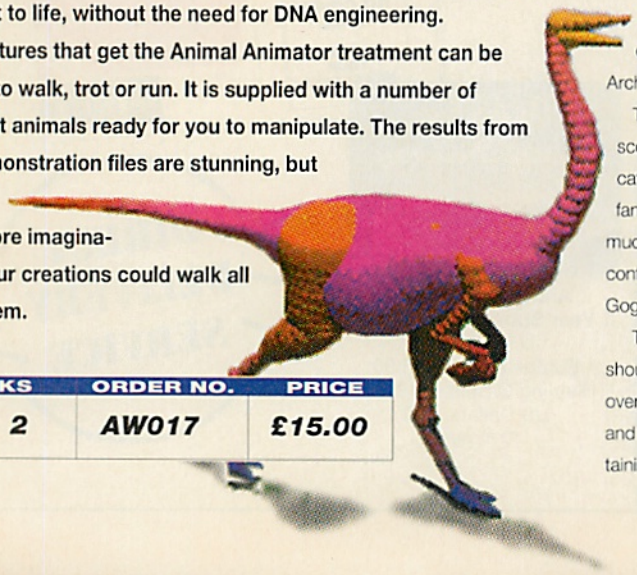
| | 7 | AW006 | £30.00 |



## Animal Animator

**Create your own micro Jurassic Park with this popular package. Animal Animator gives you the ability to design and animate your own creatures, ranging from dinosaurs to aliens - in fact, any creature that has a torso and limbs can be brought to life, without the need for DNA engineering.**

**Creatures that get the Animal Animator treatment can be taught to walk, trot or run. It is supplied with a number of different animals ready for you to manipulate. The results from the demonstration files are stunning, but with a little more imagination, your creations could walk all over them.**



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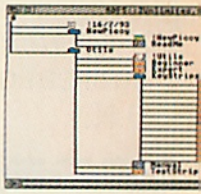
| | 2 | AW017 | £15.00 |

## Utils



Utils is one of the most comprehensive utility packages available for RISC OS. Compatible with both RISC OS2 and 3, it combines a wide range of facilities into one program.

Utils makes using the desktop easier with functions such as keyboard macros for desktop and CLI functions, desktop window tidying options, a reconfigurable RAM Disk, an application menu to locally store application run paths as an alternative or addition to the Pinboard, desktop clocks, !RUN file editor and much more.

Utils is one of the first programs to run its own internal check for any sign of virus activity. This ensures that Utils will remain safe to use at all times.

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| | 1 | AW023 | £10.00 |

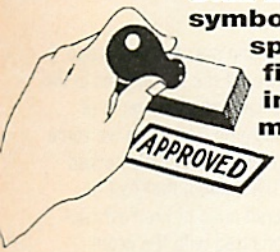
# Clipart Collection

**This is an ever expanding collection of clip art for use on any Archimedes. In essence, the art contained upon these disks is for use with DTP type systems, although the file types are standard and are fully compatible with Paint or Draw. Watch out for new additions soon.**

## PACK 1 - Borders, Business, Signs & Symbols

**Disk 1: Over 200 ornamental frame borders for use in RISC OS DTP style packages. Also included is a set of bitmap clip art images on the business theme.**

**Disk 2: A set of Draw files of silhouette symbols covering a range of subjects from sport to travel. Also included is a set of five sprite files depicting icons for use in desktop applications such as multi-media or DTP.**

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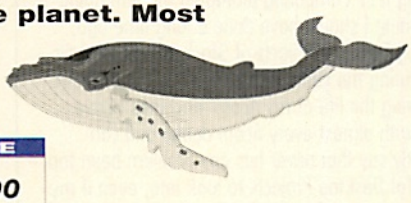
## PACK 2 - The Natural World

**This single disk pack contains a number of professionally produced vector graphics images depicting scenes from the natural world. From plantlife to wildlife, the collection conveys the true beauty of our native planet. Most images are colour and all are stored in Draw format.**



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| | 1 | AW018 | £10.00 |

## PACK 3 - Christmas Eve

**A collection of unique images for the festive season. Full colour vector images of Santa, trees, angels, baubles and everything to do with Christmas. This pack also contains a number of festive borders for your yuletide documents.**

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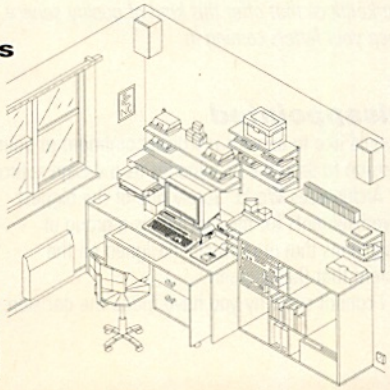
## PACK 4 - CAD

**A collection of quality line images produced by a professional draughtsman. Most images are monochrome CAD style line drawings with sections to cover computers, automotives and armaments. Over 30 top quality images in Draw format.**



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|---|---|---|---|
| | 1 | AW020 | £10.00 |

# info

## General Information

Archimedes World offers an array of useful software and support packages for every user of Acorn RISC OS computers through its regular Software Sale pages. The products advertised here are carefully chosen to provide users with the best possible quality.

All software is supplied on ADFS 800K disks and is accompanied by full instructions, sometimes supplied as text files on the disks themselves.

## New products

Archimedes World has a policy of updating its software catalogue in a regular basis, so watch out each month for new products.

## Ordering information

To place your order, please use the coupon below. Ensure that you include the title of the product you wish to order, as well as the order code (AW???). If you are paying by cheque, please write your name and address upon the reverse side. Postage and packing is free within the UK and Europe. Please add £1.00 for other overseas destinations.

Alternatively, you can place your order by phone. Please call 0442 66551 and quote your Access or Visa number. Telephone orders can be taken 24 hours a day.

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# Letters

### Lets get digital

I prefer a digital joystick to mice for game playing, any time. Like Robert Hodge (Acorn answers, Sept '93), I too have an A3010. The A3010 Joymaster disk from Leading Edge allows me to use my joystick with almost any game by emulating the mouse and/or keyboard and I can thoroughly recommend it. The company does an interface for those old-fashioned things without joystick ports, too.

**Guy Inchbald**
**Alveston, Bristol**

*Old fashioned, what do you mean? Maybe it's worth seizing this opportunity to point out that the A3010 is the only Acorn machine to include joystick ports as standard - not even the new fangled 33Mhz A5000 offers these.*

### Tragic loss

The enclosed picture of my in-law's beautiful little tricolour Cavalier King Charles spaniel named Carly, may be familiar to Archimedes users. Carly was the Pinboard model on page 25 of the RISC OS3 User Guide, appeared in Longman Logotron's Revelation ImagePro brochure and was on a demonstration CD-ROM compiled by Hitachi in 1991 and distributed free to every secondary school in the country. She is also, I am told, the backdrop to Roger Wilson's Pinboard!

Unfortunately, Carly who was loved by everyone who knew her, suffered eye damage at the hands of a two-year-old while on holiday in Yorkshire and, following a short but tragic illness, died on September 3rd aged 5 ½.

I am sure your readers will be saddened by the loss and that they will join me in extending their sympathies to the Woodcrafts of Witham, Essex, who raised the happiest, gentlest, most affectionate dog you could wish to meet, and who are, needless to say, devastated by Carly's untimely death.

**Adam Curtin.**

### Praise indeed

I would like to endorse Mr. D Lewis' letter (September) Re: Saltash based company IFEL. I too have found the staff to be friendly and courteous in every way.

In May of this year, my A310 started to go wrong so I took it to my local computer repairer who told me I would need a new motherboard. Having had some dealings with IFEL in the past I rang them to see if they agreed with what I was told. IFEL asked me to send off my computer to them and they would check it out. Within four days it was returned and on ringing them I was told that it was the disk drive at fault and there would be no charge for the test or postage. I decided to order a new drive from IFEL and again received it within four days, with a note thanking me for my custom. I immediately rang them and thanked them for their excellent service.

**A. Hill**
**Tring, Hertfordshire**

### Praise too

Reading a letter last month in your magazine praising IFEL Computing prompted me into doing something I should have done a long time ago; praising Desktop Projects of Stockport for all their help during the years that I have dealt with them.

During the life of my Acorn machines I have dealt with almost every Acorn dealer and can honestly say that never has any problem been too small for Desktop Projects to look into, even if my problem at times was self inflicted, nor have I had mods or add ons fitted in such a consistently competent manner by any other dealer.

It also makes a refreshing change to be able to buy something without worrying later if you have had a good deal. I feel that companies like this are the backbone of the Acorn world, without which Acorn would have died long ago. This is a genuine enthusiastic Acorn dealer.

**Mark Flemming**
**Deeside, Clwyd**

*It's good to see that there are companies in our marketplace that offer this kind of quality service. Keep your letters coming in.*

### Disappointed

I would like to express my disappointment at your decision to drop the Archimedes as a design source for Archimedes World. Surely one of the biggest advertisements for the machine is a group of magazines that are actually designed on the system that they support.

I cannot see why you have made the decision to change to Macintosh make up. I use my A5000 quite religiously to design a local parish magazine, leaflets and flyers and other printed material and have experienced no problems at all. I have found it to be cost effective, very fast and incredibly easy to use. What's more, with software like ArtWorks and Impression around, I doubt that the Macintosh can offer much better.

Terry Smith
Liverpool

When I joined the magazine over two years ago, I was amazed at the power of the Archimedes in the DTP environment. However, after two years of experiencing tremendous problems when we come to the Postscript output stage, we finally backed down and opted for a DTP system that cost an awful lot more but offered none of the Postscript problems that we experienced with the Acorn system. I am not trying to put the system down, quite the opposite, it's just that Postscript is an awkward beast at the best of times and by using so many conversion techniques, you are asking for trouble.

On your point about Macintosh software, you've obviously never seen products like Quark Express, Photoshop, Aldus Freehand, I could go on.

### Giving it some stick

Further to the article in Acorn Answers in the September issue concerning joystick compatibility on the A3010, may I take this opportunity to remind you and all the readers that several joystick interfaces (for all machines) and special software for the A3010 exists, to allow the use of joysticks to be used with all games.

Perhaps The Fourth Dimension would like to inform us of its decision not to support joysticks, especially with Acorn's adoption of a joystick standard and ports being found on a A3010. This attitude will surely only lead to Acorn's standing as a home computer being scarred.

**Ian Hallsworth**
**Rolleston, Staffordshire**

*It is worth pointing out that the recent clutch of games from the 4th Dimension do support joystick control where applicable.*

### First Impressions - last

I will shortly need to purchase a DTP package for my A5000 and was seriously considering Impression. However, I have been told that the package is to be updated in the near future and do not want to spend so much money if the product will be out dated in a short time. Does Computer

Concepts have an inexpensive upgrade path or will I need to buy it all over again when Impression Publisher is released?

**Trevor Hummick**
**Sea Palling, Norfolk**

*Impression II will be replaced by Impression Style later this year, according to Computer Concepts. A recent press release stated that anyone purchasing a copy of Impression Junior or Impression II after the 1st of September this year would be automatically eligible for a free upgrade when the new version are released. However, I would recommend that anyone considering such a purchase should contact the company to check first.*

### Head first

You may wonder why my letter is written in capital letters (this has been corrected for printing -Ed.), It's because a pin is damaged on my print head. I bought a Citizen printer along with the colour option a while back and have been delighted with it. At the time it seemed to be a cheap option for a printer but this is no longer so. The cost of a new print head is only slightly less than the cost of a new printer. I saw a dot matrix computer in Tandy so I asked them to find out the cost of a printer head - the price was only slightly less than the cost of the printer.

I have not abused my printer or used it a great deal, but with a hawk digitiser, which I use in my local history work, I am now left with the option of repair or a new printer.

When you publish an article about computer printers, please also inform people of the cost of replacement parts when things go wrong, as an expensive printer might have been a better option than one in which a single spare part is 90% of the cost of the printer.

**R. Butler,**
**Kirklevington, Cleveland**

*Although it is a nice idea, I'm afraid that it's not practical. Printers can have any number of problems arising after use. Print heads are not necessarily the most fallible part; the platen or print head motors may fail, a buffer chip may go up in smoke or the power supply might overheat and burn your house to the ground - not that this is likely, I hasten to add. It's just not viable to purchase electronic equipment on the basis of its repair cost.*

### ROM with a future

I've been considering buying a CD ROM drive for my Acorn for the last three months. Although the prices are falling the one thing that is hold me back is the thought not being able to buy much software on CD. There are very few general titles around at the moment with most being aimed at education. Are we likely to see any general CD developments in the future and is it worth me spending £300 or more on this technology at the moment?

**Roger Lomax**
**Bakewell, Derbyshire**

*The biggest developments in CD are on PC and Macintosh platforms at the moment. Naturally, with around 650Mb of storage space to fill, the development costs can be prohibitively high, so the biggest developments on the RISC OS platform will be for guaranteed markets, such as education. I think that it unlikely that many general CD titles will be released for the Acorn during the next six months or more. Having said that, Computer Concepts is poised to launch a CD version of ArtWorks with lots of clip art images and a separate disc full of clip art.*

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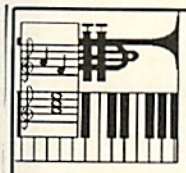

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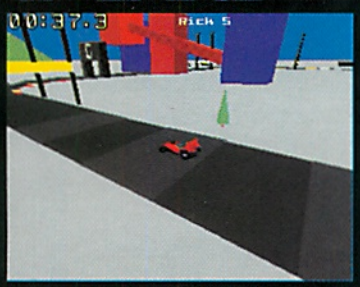
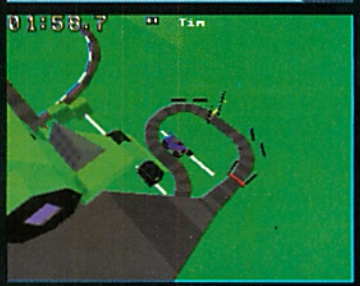
# Stunt Racer 2000

## 'A game ahead of its time!'




**The creators of *Chocks Away* are proud to present *Stunt Racer* 2000.**

The year is 2037 and the world of motor sport has changed considerably to meet the demands of the excitement thirsty audiences. The World Federation Entertainments Network (Known as Fednet or WFE) broadcast Stunt Racer 2000 to a worldwide audience of over 750 million. Those who are brave enough to race can reap the rewards of stardom, wealth, fame and glory or be lost amongst the mass of failed Stunt Racer 2000 drivers. The racing season takes place on 16 demanding tracks over all terrains including desert, arctic and lunar tracks featuring a wide selection of jumps and stunts. After completion of all 16 tracks the top drivers will get to race on the Supreme Stunt Racer 2000 track which is the ultimate test of driving skill.

Stunt Racer 2000 has been carefully developed by the Fednet team over the last year and includes all the best features from other racing games and many innovative new features. The game is designed to be pseudo technical whilst keeping the easy to play arcade feel.

GAME FEATURES INCLUDE:

- Fast solid 3D vector graphic with a large selection of viewing angles and track side cameras.
- Lots of sampled sound effects and plenty of in-game music.
- Two-player split-screen or serial link options.
- Easy to use icon driven menu system to select the many features.
- 'Practice', 'Qualify' and 'Race' on a total of 19 varied and demanding tracks over 60 miles in length.
- Review your performance with the excellent replay feature.
- Vast selection of track pieces including Bank Corners, Various Jumps and Bumps, Moving 'Surf Track, 360 Degree Loops, Raised Sections, Track Hammers, Wave Bridges, Twister Jumps, Transporter Gates, Car Lifts and Acceleration Gates to mention but a few.
- Cash awards for winning races allowing you to increase your cars performance by buying Extra Tyre Grip, Increased Engine Power, Nitro, Mega Boosts and Car Scanners.
- Selectable gear ratios allowing you to fine tune your cars performance to suit the varied tracks.
- All player and computer controlled cars are accurately modelled using sophisticated alogrithms to calculate skidding, collisions, gravity, acceleration etc.
- Two player 'Killer' – destroy your opponent on specially designed tracks. Save player files and game configuration onto disc.

**For All 32-bit Acorn Risc Machines**
**Requires 1 Megabytes £34.95**

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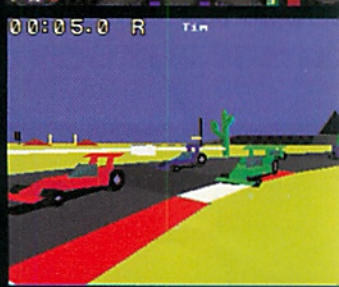
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